

Delaware Coastal Management Program

Comprehensive Update and Routine Program Implementation

June 2011

Program Summary to
Supplement 1979 Document



1.0	DELAWARE COASTAL MANAGEMENT PROGRAM SUMMARY	4
1.1	Forward	4
1.2	Routine Program Change	4
1.3	Delaware's Coastal Management Area	4
1.4	Delaware Coastal Zone Act and the Delaware Coastal Management Program	4
2.0	FEDERAL CONSISTENCY	5
2.1	Introduction	5
2.2	Applicability of Consistency Provisions	5
3.0	PROCEDURES FOR FEDERAL CONSISTENCY REVIEWS	6
3.1	Direct Federal Activities and Development Projects	6
3.2	Federal Licenses and Permits	8
3.3	Federal Assistance to State and Local Governments	13
3.4	OCS Exploration, Development and Production Activities	15
3.5	Appeals and Secretarial Review Relative to Federal Consistency	16
4.0	PROCEDURES FOR FEDERAL INTERSTATE CONSISTENCY REVIEWS	17
4.1	Notification and Review Process	18
4.2	Concurrence with an Interstate Consistency Certification	18
4.3	Objection to an Interstate Consistency Certification	18
4.4	Applicability	18
5.0	DELAWARE COASTAL MANAGEMENT PROGRAM POLICIES	20
5.1	Wetlands Management	20
5.2	Beach Management	22
5.3	Coastal Waters Management	25
5.3.1	General	25
5.3.2	Marinas	33
5.4	Subaqueous Lands and Coastal Strip Management	36
5.5	"Public Lands" Management	43
5.6	Natural Areas Management	44
5.6.1	General	44
5.6.2	Inland Bays' Watershed Management	45
5.7	Flood Hazard Areas Management	45
5.7.1	General	45
5.7.2	Advisory Policies	46
5.8	Port of Wilmington	46
5.8.1	Advisory Policies	46
5.9	Woodlands and Agricultural Lands Management	47
5.9.1	Woodlands	47
5.9.2	Silviculture	47
5.9.3	Agricultural Lands	48
5.9.4	Tax Ditches	48
5.9.5	Advisory Policy	49

5.10	Historic and Cultural Areas Management	49
5.10.1	General	49
5.10.2	Advisory Policy	50
5.11	Living Resources	50
5.11.1	General	50
5.11.2	Fish and Wildlife	51
5.11.3	Nongame and Endangered Species	51
5.11.4	Advisory Policy	51
5.12	Mineral Resource Management	52
5.13	State Owned Coastal Recreation and Conservation	52
5.14	Public Trust Doctrine	52
5.15	Energy Facilities	52
5.15.1	General	52
5.15.2	Advisory Policies	53
5.16	Public Investment	54
5.16.1	General	54
5.16.2	Advisory Policies	54
5.17	Recreation and Tourism	54
5.17.1	Advisory Policies	54
5.18	National Defense and Aerospace Facilities	55
5.18.1	Advisory Policy	55
5.19	Transportation Facilities	55
5.19.1	General	55
5.19.2	Advisory Policies	55
5.20	Air Quality Management	56
5.21	Water Supply Management	57
5.21.1	General	57
5.21.2	Construction and Use of Wells	57
5.21.3	Underground Injection Control	58
5.21.4	Advisory Policies	59
5.22	Waste Disposal Management	59
5.22.1	On-site Wastewater Treatment and Disposal System Management	59
5.22.2	Land Treatment of Wastes	61
5.22.3	Disposal of Solid Wastes	62
5.22.4	Hazardous Waste Management	64
5.22.5	Cleanup of Hazardous Substances	66
5.22.6	Underground Storage Tanks	68
5.23	Development	71
5.23.1	Advisory Policies	71
5.24	Pollution Prevention	72
5.24.1	General	72
5.24.2	Advisory Policies	72
5.25	Coastal Management Coordination	73

1.0 DELAWARE COASTAL MANAGEMENT PROGRAM SUMMARY

1.1 FORWARD

The Coastal Zone Management Act (CZMA) was signed in 1972 (P.L. 92-583). It has since been amended, with the most recent amendment in 2005. The Act and its amendments affirmed a national interest in the effective protection and development of the coastal zone. The CZMA authorized the Federal Grant-in-aid program to be administered by the Secretary of Commerce. They in turn appointed the National Oceanic and Atmospheric Administration (NOAA) as the responsible authority for the federal CZMA.

In response to the CZMA of 1972, Delaware prepared a Final Environmental Impact Statement (FEIS) for the development of a coastal program and submitted it to NOAA. In 1979, the Delaware Coastal Management Program was approved by NOAA under authority of the CZMA (15 CFR Part 923). The FEIS established the Delaware Coastal Management Program (DCMP), as well as its goals and policies and became Delaware's Program Document. This document has been periodically updated to reflect changes in Delaware's environmental laws and regulations as well as activities affecting coastal uses and resources. The Department of Natural Resources and Environmental Control (DNREC) is the agency responsible for administering the State's Coastal Management Program.

Section 306 of the CZMA provides states with approved coastal management programs the authority to review federal activities (direct actions, licenses or permits, assistance, and Outer Continental Shelf exploration) and interstate activities for consistency with State Coastal Management Policies.

1.2 ROUTINE PROGRAM CHANGE

Section 306 of the Coastal Zone Management Act, as amended, provides states with a means to update their coastal programs with approval from NOAA. This procedure is called a Routine Program Change (RPC). NOAA issued new guidance in July, 1996 regarding RPC's. The DCMP has revised this Policy Document in accordance with the RPC Guidance and determined this update qualifies as an RPC.

1.3 DELAWARE'S COASTAL MANAGEMENT AREA

Delaware has defined its Coastal Management Area as the entire state for the purposes of the federally approved coastal management program.

1.4 DELAWARE COASTAL ZONE ACT AND THE DELAWARE COASTAL MANAGEMENT PROGRAM

The State of Delaware promulgated the Delaware Coastal Zone Act (7 *Del. C.*, Chapter 70) in the early 1970's. This State law allows the DNREC to regulate industry in the Coastal Strip of Delaware. The Coastal Strip is defined in the statute. It is approximately any lands and waters east of State Routes 13, 113, and 1 (north-south corridors), and an area on the north and south of the Chesapeake and Delaware Canal.

The Delaware Coastal Zone Act is incorporated into the DCMP Policy Document. Industrial development activities within the Coastal Zone Strip require a permit from the DNREC.

2.0 *FEDERAL CONSISTENCY*

2.1 INTRODUCTION

The Federal Coastal Zone Management Act of 1972, as amended, (CZMA; 16 USC §§1451, 1465) provides that each federal agency conducting or supporting activities, whether within or outside the coastal zone, affecting any land or water use or natural resource of the coastal zone, must do so in a manner which is, to the maximum extent practicable, consistent with Delaware's Coastal Management Program (DCMP).

In addition, federal permits and licenses, outer continental shelf (OCS) plans, and grants-in-aid which may affect Delaware's coastal zone management area must be consistent with the DCMP. The federal consistency provisions are intended to provide a means for improved federal-local coordination regarding important federal actions which could affect the coastal resources of Delaware.

Consistency reviews enable the State to:

- Plan for and manage impacts resulting from a Federal project, permit or program.

- Provide for analysis of the effects of Federal actions.

- Identify Federal actions that could adversely affect coastal resources, general land use patterns, or public investment requirements.

- Provide for an examination of Federal actions in the context of the goals, objectives, and policy network contained in the DCMP.

Consistency offers Delaware's state agencies, through the DCMP within the Department of Natural Resources and Environmental Control (DNREC), Division of Soil & Water Conservation, an opportunity for a positive voice in federal actions. It ensures that state concerns and policies will be considered by federal agencies in federal development projects, the issuance of federal licenses and permits, the approval of OCS plans and programs, and the award of federal grants, loans, subsidies, insurance, or other forms of federal aid.

2.2 APPLICABILITY OF CONSISTENCY PROVISIONS

Sections 307(c) and (d) of the CZMA provide that:

- 2.2.1 Federal activities and development projects affecting any land or water use or natural resource of Delaware's coastal zone management area shall be conducted consistent with the DCMP to the maximum extent practicable.
- 2.2.2 No federal license or permit shall be granted until: a) the DCMP has concurred with the applicant's certification; or until, b) by the DCMP's failure to act, consistency is conclusively presumed; or, c) on appeal to the Secretary of Commerce, the Secretary overrides the state's objection. (See Section 3.5)

- 2.2.3 No federal agency shall grant a license or permit for any activity described in detail in an OCS plan which affects any land or water use or natural resource in the coastal zone until the DCMP concurs with the certification of consistency made by the person submitting the OCS plan, except upon an override by the Secretary of Commerce. (See Section 3.5)
- 2.2.4 Federal agencies shall not approve proposed assistance projects to state and local governments that affect the coastal management area and are inconsistent with the DCMP, except upon an override by the Secretary of Commerce. (See Section 3.5)

3.0 PROCEDURES FOR FEDERAL CONSISTENCY REVIEWS

Applicants should send their Consistency Certifications and all supporting documentation (including federal application packages, maps, technical drawings, etc.) to:

Sarah W. Cooksey, Administrator, Delaware Coastal Management Program
Department of Natural Resource and Environmental Control
89 Kings Highway, Dover, DE 19901
Phone: (302) 739-9283

3.1 DIRECT FEDERAL ACTIVITIES AND DEVELOPMENT PROJECTS

Federal agencies proposing activities and development projects must submit a consistency determination to the DCMP where such projects are likely to affect Delaware's coastal resources. Under federal regulations this includes all functions of a federal agency performed by it or on its behalf, including: planning, construction, modification, or removal of public works, facilities, or other structures, and the acquisition, utilization, or disposal of land or water resources. [15 CFR §930.31]

The following procedures apply to federal activities and development projects:

3.1.1 Notification

Federal agencies must provide the DCMP, at the earliest practicable time, with consistency determinations for all proposed federally conducted or supported activities directly or indirectly affecting the coastal zone management area. Such consistency determinations must be received at least 90 days before the federal activity or development project reaches a final decision stage likely to restrict the consideration of alternative approaches or measures. In a limited number of cases, federal agencies must also submit a consistency determination for ongoing activities initiated prior to approval of the DCMP. [15 CFR § 930.36]

The consistency determination from the federal agency must contain:

- 3.1.1.1 A brief statement indicating how the proposed action will be undertaken in a manner consistent to the maximum extent practicable with the DCMP. The term 'maximum extent practicable' describes the requirement for federal activities to be fully consistent with such programs unless compliance is prohibited based upon

the requirements of existing law applicable to the federal agency's operations. [15 CFR §930.32]

3.1.1.2 An evaluation of the relevant policies of the DCMP. [15 CFR §930.39]

3.1.1.3 A detailed description of the proposed action, its associated facilities and their combined coastal zone effects.

3.1.1.4 Relevant data and information, including time schedules, sufficient to support the federal consistency determination.

3.1.2 State Review

Pursuant to 15 CFR §930.41, the DCMP shall inform the federal agency of its agreement or disagreement with the federal agency's consistency determination at the earliest practicable time. The response time will not exceed 60 days following receipt of federal notification unless an extension has been granted.

Upon receipt of a federal consistency determination the DCMP will notify affected network program partners. The DCMP shall be responsible for coordinating the review, compiling comments, and responding to the federal agency.

3.1.2.1 Public Notice

The State will also provide adequate public notice of the proposed federal action. The public notice process is as follows:

3.1.2.1.1 The DCMP will give at least 20 days public notice prior to response to consistency certification. In the event that a state permit is required for the same activity, the DCMP will coordinate their review with the state permitting agencies.

3.1.2.1.2 The notice shall describe the subject matter of the certification review, including a summary of the proposed activity and an announcement of the availability of consistency certification and accompanying public information.

3.1.2.1.3 The notice shall request interested parties to comment on the proposed activity.

3.1.2.1.4 The notice shall be published in a minimum of two Delaware newspapers of general circulation.

3.1.2.1.5 Public notice may be expanded in proportion to the degree of likely public interest involved, the substantial commitment of or impact on coastal resources, the complexity or controversy of the proposal, or for other good reasons.

3.1.2.1.6 As needed, a notice shall be provided indicating the date, time, and place of any hearing to be held by the DCMP.

3.1.3 DCMP Objection to a Consistency Determination

In the event the DCMP disagrees with the federal agency's consistency determination, a notification will be sent to the affected federal agency and to the Director of the federal Office of Ocean and Coastal Resource Management (OCRM), National Oceanic and Atmospheric Administration (NOAA).

3.1.3.1 Notification of Objection

The notification shall:

- 3.1.3.1.1 Describe how the proposed activity is inconsistent with specific enforceable policies of the management program;
- 3.1.3.1.2 Identify alternative measures, where feasible, which would make the proposed action consistent; and
- 3.1.3.1.2 Describe the nature and necessity of additional information that may be required for making a consistency determination if the objection is based on insufficient information.

3.1.3.2 Mediation

When the DCMP objects to a consistency determination, the DCMP will attempt to resolve its concerns with the federal agency. However, in the event of a serious disagreement between a federal agency and the DCMP, either party may request formal mediation through the Secretary of Commerce as provided for in 15 CFR Part 930, Subpart G, or informal negotiations through OCRM. Both processes are voluntary and non-binding.

3.1.4 Modification of Consistency Determination Process

The DCMP recognizes the need for flexibility in this process, such as shorter review time, special consistency agreements, and waivers in the interests of national security or overriding national interest. The DCMP, through direct negotiations with federal agencies, may agree to limit the applicability of consistency review based upon the scope, size, location or other characteristics of the proposed federal action.

3.2 FEDERAL LICENSES AND PERMITS

Activities requiring a federal license or permit are subject to consistency when the activities, whether in or outside the coastal zone, are likely to affect any land or water use or natural resource of Delaware's coastal zone management area. Applicants for federal licenses or permits must certify to the permitting federal agency and the DCMP that the proposed project will be conducted in a manner consistent with the enforceable policies of the DCMP. Proposed activities subject to this section include those requiring federal authorizations, certifications, approvals, or other forms of permission granted by any federal agency to an applicant, except OCS leases and federal agencies permit applications for federal permits which are covered separately.

Pursuant to 15 CFR§930.53(a), the DCMP has prepared a list of those federal licenses and permits which are considered to "affect the coastal zone (See Section 3.2.8). No federal license or permit described on this list can be granted until after the applicant certifies that the proposed activity

complies with and will be conducted in a manner consistent with the DCMP and the DCMP concurs.

The following procedures apply to federal licenses and permits:

3.2.1 Notification

Federal agencies are required to inform applicants for listed federal licenses and permits of the applicant's responsibility for notification to the State and submission of required information and a consistency certification. The notice and consistency certification shall comply with 15 CFR §930.57 and §930.58.

Applicants should consult with the DCMP at the earliest practicable time for assistance regarding the DCMP policies applicable to the proposed project and certification requirements.

When satisfied that the proposed activity meets the federal consistency requirements, all applicants for federal licenses or permits subject to consistency shall provide in the application to the federal licensing or permitting agency a certification that the proposed activity complies with and will be conducted in a manner consistent with the State's approved management program. The applicant's consistency certification shall be in letter format and be accompanied by the necessary data and information. The consistency certification shall contain the following statement:

"The proposed activity complies with Delaware's approved coastal management program and will be conducted in a manner consistent with such program."

At the same time an application is submitted to the federal agency for a listed federal license or permit, the applicant shall transmit a copy of the application and consistency certification to the DCMP.

3.2.2 Necessary Data and Information

The applicant shall furnish the DCMP with necessary data and information along with the consistency certification. Such information and data shall include:

- 3.2.2.1 A detailed description of the proposed activity and its associated facilities. This description should be adequate to permit an assessment of their probable coastal zone effects. This includes, but is not limited to, a copy of the federal permit application package, maps, diagrams, technical data, etc.
- 3.2.2.2 A brief assessment relating the probable coastal zone effects of the proposed project and its associated facilities on any land or water use or natural resource of the coastal zone to the relevant enforceable policies of the Delaware Coastal Management Program.
- 3.2.2.3 A brief set of findings, derived from the above assessment, indicating that the proposed activity, its associated facilities, and their effects are all consistent with the provisions of the DCMP.
- 3.2.2.4 Upon the applicant's request, the DCMP shall provide assistance for developing the assessment and findings described in items 3.2.2.2 and 3.2.2.3.

3.2.3 State Review

Pursuant to 15 CFR §930.60, State review of a federal license or permit application is initiated upon receipt of a complete consistency certification and the necessary data and information as specified in 15 CFR §930.57 and §930.58.

The State will also provide adequate public notice of the proposed federal permit or license. The public notice process is as follows:

3.2.3.1 Public Notice

- 3.2.3.1.1 The DCMP will give at least 30 days public notice prior to response to consistency certification. In the event that a state permit is required for the same activity, the DCMP will coordinate their review with the state permitting agencies.
- 3.2.3.1.2 The notice shall describe the subject matter of the certification review, including a summary of the proposed activity and an announcement of the availability of consistency certification and accompanying public information.
- 3.2.3.1.3 The notice shall request interested parties to comment on the proposed activity.
- 3.2.3.1.4 The notice shall be published in a minimum of two Delaware newspapers of general circulation.
- 3.2.3.1.5 Public notice may be expanded in proportion to the degree of likely public interest involved, the substantial commitment of or impact on coastal resources, the complexity or controversy of the proposal, or for other good reasons.
- 3.2.3.1.6 As needed, a notice shall be provided indicating the date, time, and place of any hearing to be held by the DCMP.

3.2.3.2 Review Process

Review of consistency certifications and supporting documentation will be conducted by the DCMP in coordination with networked program partners. If a state permit is required for the same activity, the State permitting agency's review of the permit applications will become part of the DCMP's consistency review.

Consistency certifications will be reviewed to determine whether or not:

- 3.2.3.2.1 Sufficient information was submitted to determine consistency.
- 3.2.3.2.2 The proposed activity by itself, or in combination with existing projects, would cause a violation of a Delaware statute, regulation, or enforceable policy contained in the program, or result in an adverse impact of an unacceptable nature as defined by the management program.
- 3.2.3.2.3 Alternative measures exist, which if adopted by the applicant, would permit the proposed activity to be conducted in a manner consistent with the DCMP.

3.2.4 Concurrence with a Consistency Certification

At the earliest practicable time following the close of the public comment period, the DCMP shall notify the applicant and the federal and/or state permitting agency whether it concurs or objects to the consistency certification. Concurrence shall be in writing. If the DCMP does not respond within six months from the commencement of review, concurrence shall be conclusively presumed. If a consistency decision has not been issued within 3 months following the commencement of review, the DCMP shall notify both the federal permitting agency and applicant of the status of the matter and the basis for further delay.

3.2.5 Federal Action Following Delaware Concurrence with a Consistency Certification

If the DCMP issues a concurrence (or concurrence is conclusively presumed) with the applicants' consistency certification, the federal agency may approve the application for a federal license or permit (state permits may still be required).

3.2.6 Federal Action Following Delaware Objection to a Consistency Certification

At any time during the six month review period, the DCMP may object to the consistency certification. Such objection will be contained in a written notice from the DCMP to the applicant, the federal agency, and the Director of OCRM. The objection shall:

- 3.2.6.1 Describe how the proposed action is inconsistent with the enforceable policies of the management program.
- 3.2.6.2 Identify alternative measures, where feasible, which would make the proposed action consistent.
- 3.2.6.3 Describe the nature and necessity of additional information required for making a consistency determination if the objection is based on insufficient information. [15 CFR §930.64(d)]
- 3.2.6.4 Describe the applicant's right to appeal to the Secretary of Commerce.

Upon receipt of a State's objection, the federal agency shall not grant the federal license or permit, except where, upon appeal to the Secretary of Commerce, the Secretary overrides DCMP's objection based upon a finding that the proposed activity is either consistent with the purposes of the CZMA or is in the interest of national security [15 CFR Part 930, Subpart H]. The State's objection shall include a statement informing the applicant of a right to appeal to the Secretary of Commerce. (See Section 3.5) Regardless of DCMP's consistency decision or the Secretary's decision in an appeal, the project may not commence until all necessary State permits are obtained.

3.2.7 Modification of Consistency Certification Process

Pursuant to 15 CFR §930.54 the DCMP, with assistance from federal agencies, may monitor other federal license and permit activities that may reasonably be expected to affect Delaware's coastal zone management area, but are not listed in the DCMP. Delaware intends to monitor unlisted federal license and permit activities through the A-95

Process/State and Regional Clearinghouses, NEPA environmental impact statements, and routine reporting of regional resource agencies.

Should the DCMP determine that an unlisted license or permit activity could be reasonably expected to affect the coastal zone, notification will be sent to the appropriate federal agency, the Director of OCRM, and the applicant of the DCMP's intent to review the activity for consistency pursuant to 15 CFR §930.54.

3.2.8 Applicability

Federal license and permit activities requiring federal consistency certification:

3.2.8.1 Department of Defense - Army Corps of Engineers

- 3.2.8.1.1 Construction of dams or ditches across navigable waters, or obstruction of navigable waters required under Section 9 and 10 of the Rivers and Harbors Act of 1899 (33 USC 401, 403).
- 3.2.8.1.2 Establishment of harbor lines pursuant to Section 11 of the Rivers and Harbors Act of 1899 (33 USC 4004, 405).
- 3.2.8.1.3 Occupation of sea wall, bulkhead, jetty, dike, levee, wharf, pier or other work built by the United States pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408).
- 3.2.8.1.4 Approval of plans for improvements made at private expense under USCOE supervision pursuant to the Rivers and Harbors Act of 1899 (33 USC 565)
- 3.2.8.1.5 Discharge of fill into the waters of the United States pursuant to the Clean Water Act of 1987, Section 404.
- 3.2.8.1.6 All actions for which permits are required pursuant to Section 103 of the Marine Sanctuaries Act of 1972 (33 USC 1413).
- 3.2.8.1.7 Construction of Artificial islands and fixed structures on the Outer Continental Shelf pursuant to Section 4(f) or the Outer Continental Lands (43 USC) not otherwise covered in an OCS plan.
- 3.2.8.1.8 Port Access Routes pursuant to 43 USC 1333(F)

3.2.8.2 Department of Transportation – U.S. Coast Guard

- 3.2.8.2.1 Construction or modification of bridges, causeways or pipelines over navigable water pursuant to 49 USC 1455.

3.2.8.3 Environmental Protection Agency

- 3.2.8.3.1 NPDES Permits and other permits for federal installations, discharges in contiguous zones and ocean waters, sludge runoff permits and agricultural waste disposal pursuant to Sections 401, 402, 403, 405, and 318 of the Clean Water Act of 1987.
- 3.2.8.3.2 Permits pursuant to the Resource Recovery and Conservation Act of 1976.
- 3.2.8.3.3 Permits pursuant to the Clean Air Act of 1990.

3.2.8.4 Federal Energy Regulatory Commission

- 3.2.8.4.1 Licenses and permits ordering interconnection of electric transmission lines; issuing certificates of public convenience and necessity for interstate natural gas transmission and terminals including approval of LNG sites; approvals for abandonment of natural gas pipelines; and licenses required for non-federal hydroelectric projects and associated transmission lines.
- 3.2.8.4.2 Licenses of outer continental shelf (OCS) construction and operations and other authorizations and exemptions by the Federal Energy Regulatory Commission under the Federal Power Act 16 U.S.C 792-823, as amended, for OCS activities including hydrokinetic energy activities.

3.2.8.5 Nuclear Regulatory Commission

- 3.2.8.5.1 Licensing and certification of the construction and operation of nuclear power plants and possession and use of by-products, source and special nuclear material, pursuant to Atomic Energy Act of 1954, Title II of the Energy Reorganization Act of 1974 and the National Environmental Policy Act of 1969.

3.2.8.6 Department of Energy

- 3.2.8.6.1 Regulation of gas pipelines, and licensing of import or export of natural gas pursuant to the Natural Gas Act (15 USC 717) and the Energy Reorganization Act of 1974.
- 3.2.8.6.2 Siting, construction and operation of non-nuclear power plants.

3.2.8.7 Department of Interior – Bureau of Ocean Energy Management, Regulation and Enforcement

- 3.2.8.7.1 Leases, permits, approval of outer continental shelf (OCS) exploration and development and production plans, and other authorizations by the Bureau of Ocean Energy Management, Regulation and Enforcement under the Outer Continental Shelf Lands Act (OCSLA) 43 U.S.C. 1331 et. seq., as amended, for OCS activities including oil and gas activities, alternative energy activities, and alternate uses of existing facilities.

3.2.8.8 Federal Aviation Administration

- 3.2.8.8.1 Airport Layout Plans (FAA Order 5050.4A, paragraph 22(8)(d))

3.3 FEDERAL ASSISTANCE TO STATE AND LOCAL GOVERNMENTS

Pursuant to 15 CFR Part 930, Subpart F, state and local governments submitting applications for federal assistance affecting Delaware's coastal zone management area shall certify that the projects are consistent with the policies of the DCMP. Federal assistance means assistance provided under a Federal program to an applicant agency through grant or contractual

arrangements, loans, subsidies, guarantees, insurance, or other forms of financial aid. An applicant agency means any unit of state or local government that submits an application for federal assistance.

3.3.1 DCMP Consistency Provision Relative to Federal Assistance

Applications by state, county and municipal agencies for federal assistance must be reviewed by the state Federal Aid Review Committee (FARC). Additionally, all applications from governmental entities which receive State funds must be reviewed and approved by the Delaware State Clearinghouse Committee (DSCC), a legislatively mandated review body whose membership includes representatives of the executive and legislative branches of State government. The DSCC may veto applications and prevent their further consideration by a federal agency. Other reviews are also required at the regional level for projects in New Castle County.

To ensure consistency with the DCMP and conform to NOAA regulations, DCMP reviews all federal assistance applications and make the final consistency determination in consultation with the FARC and the DSCC.

In the event the DCMP objects to the applicant agency's proposal on grounds of inconsistency with the DCMP, the objection must include the reasons and supporting information for such action.

The DCMP will then notify the applicant agency and the federal agency of the State's objection. The State's objection notification will:

- 3.3.1.1 Describe how the proposed project is inconsistent with specific elements of the management program.
- 3.3.1.2 Identify alternative measures, if any, which would make the proposed action consistent.
- 3.3.1.3 Describe the nature and necessity of additional information required for making a consistency determination if the objection is based on insufficient information.
- 3.3.1.4 Describe the applicant's right to appeal to the Secretary of Commerce.

3.3.2 Modification of Consistency Certification Process

The DCMP will monitor federal assistance projects and programs through the State Clearinghouse review process and other means. If the monitoring indicates that significant impacts on the State's coastal resources have occurred or could occur from federal assistance projects, a formal consistency review and determination pursuant to the federal regulations will be requested. In such cases, the DCMP will notify the applicant agency, involved federal agencies, and the OCRM Director of its intention to make such a determination.

Some federal assistance programs are neither subject to OMB Circular A-95 nor to the review process required by the Delaware State Clearinghouse Committee. In these cases the DCMP will monitor program activity through the Federal Register, informal and formal federal agency contact, newsletters, State-local technical assistance projects, and other means. Where it is determined that such programs could have a significant impact, the DCMP will review the federal program and, if appropriate, request that such federal

program be subject to the A-95/Clearinghouse review and approval process. A formal consistency certification may subsequently be required.

The DCMP reserves the right to establish a federal assistance program consistency list based on either or both of the preceding evaluations and to implement the federal assistance consistency certification process and authorities provided by 15 CFR Part 930, Subpart F.

3.4 OCS EXPLORATION, DEVELOPMENT AND PRODUCTION ACTIVITIES

The federal regulations, 15 CFR Part 930, Subpart E, provides that Outer Continental Shelf (OCS) plans submitted to the U.S. Secretary of the Interior for OCS exploration, development and production, and all associated federal licenses and permits described in detail in such OCS plans, shall be subject to a federal consistency review.

3.4.1 Applicability

This requirement applies to:

- 3.4.1.1 License and permit activities that are described in the OCS plan, such as, permits to drill, and rights-of-use and easements for the construction and maintenance of structures, platforms, gathering and flow lines.
- 3.4.1.2 OCS-related licenses and permits, such as for pipeline corridors, artificial islands or other fixed structures, transport of dredged materials, and discharges or emissions subject to the Clean Water Act of 1987 or the Clean Air Act of 1990.

3.4.2 OCS Activities Subject to Consistency

A certification of consistency for each activity described in detail in the OCS plan shall be attached to the OCS plan at the time it is submitted to the Secretary of the Interior. No federal official or agency shall grant any license or permit for any activity described in detail in the OCS plan until the State has received such certification and plan together and until the State has concurred or conclusive concurrence is presumed.

OCS plan license and permit actions not described in detail in the OCS plan are subject to the provisions for federal licenses and permits.

3.4.3 Notification and Review Process

Any person submitting to the U.S. Secretary of the Interior any OCS plan must furnish the DCMP with a copy of the OCS plan certification.

When satisfied that the proposed activities described in detail in the OCS plan meet the Federal consistency requirements, the OCS lessee or operator shall declare in the consistency certification that:

"The proposed activities described in detail in this plan comply with Delaware's approved coastal management program and will be conducted in a manner consistent with such program."

Supporting information to accompany the certification shall include the comprehensive offshore, nearshore and onshore data and material required by the Department of the Interior's operating regulations governing exploration, development and production operations on OCS [30 CFR 250]. Information supplied must include an assessment of the probable coastal zone effects, and a set of findings indicating that the proposed activities, their associated facilities, and their combined effects, are all consistent with the provisions of the management program.

In order to ensure that all levels of government and the general public are aware of and have an opportunity to comment on such plans, the DCMP will provide public notice of the receipt of such plans, the procedures for comments, and the review closing date.

3.4.4 State Concurrence with Consistency Certification

At the earliest practicable time the DCMP will notify the applicant, the Secretary of the Interior, and the Director of OCRM whether it concurs with or objects to the consistency certification.

Concurrence by the State agency shall be conclusively presumed in the absence of an objection within six months following commencement of State review.

If a consistency decision has not been issued within 3 months following the commencement of review, the DCMP shall notify both the federal permitting agency and applicant, of the status of the matter and the basis further delay.

If the State issues a concurrence or if conclusive concurrence is presumed, the OCS lessee or operator will not be required to submit additional certifications and supporting information for State review at the time federal applications are actually filed for the federal permit activities described in detail in the OCS plan. However, the lessee or operator must supply the DCMP with copies of permit applications to allow the State to monitor the approved OCS activities.

3.4.5 State Objection to a Consistency Certification

In the event the State objects to the OCS plan certification, it will accompany its objection with reasons and supporting information concerning each activity which the State finds to be inconsistent with the management program. The State's objection will include a statement informing the person of a right of appeal to the Secretary of Commerce on the grounds described below. Following receipt of a State agency objection, federal agencies may not issue any of the licenses or permits for activities described in detail in the OCS plan.

3.5 APPEALS AND SECRETARIAL REVIEW RELATIVE TO FEDERAL CONSISTENCY

The provisions of 15 CFR Part 930, Subpart H, outline procedures by which the Secretary of Commerce may override a state's objection if the Secretary finds that a federal license or permit activity, including those described in detail in an OCS plan, or a federal assistance activity, which is

inconsistent with the DCMP, may be federally approved because the activity is consistent with the objectives or purposes of the federal CZMA, or is necessary in the interest of national security.

3.5.1 Secretary Ruling

In order to be "consistent with the objectives or purpose of the federal CZMA", an activity already inconsistent with the DCMP, must be found by the Secretary of Commerce to be permissible because it satisfies the following three requirements:

- 3.5.1.1 The activity furthers one or more of the competing national objectives or purposes contained in sections 302 or 303 of the Act.
- 3.5.1.2 When performed separately or when its cumulative effects are considered, it will not cause adverse effects on the natural resources of the coastal zone substantial enough to outweigh its contribution to the national interest.
- 3.5.1.3 There is no reasonable alternative available which would permit the activity to be conducted in a manner consistent with the DCMP.

3.5.2 Filing Appeal

Pursuant to 15 CFR §930.125, an appellant may file a notice of appeal with the Secretary of Commerce within 30 days of the appellant's receipt of DCMP's objection to a consistency certification for a federal license or permit (including those described in an OCS plan), or a federal assistance program.

The notice of appeal shall be accompanied by a statement in support of the appellant's position, along with supporting data and information. The appellant shall send a copy of the notice of appeal and accompanying documents to the federal and state agencies involved. An application fee must accompany the appeal to the Secretary: \$200 for minor appeals and \$500 for major appeals, unless the Secretary, upon consideration of an applicant's request for fee waiver, determines that the applicant is unable to pay the fee. The Secretary will also collect such other fees as are necessary to recover the full costs of administering and processing the appeals.

4.0 PROCEDURES FOR FEDERAL INTERSTATE CONSISTENCY REVIEWS

Interstate consistency review is the process by which an activity occurring wholly in one state but with the potential to affect the coastal resources of another state, can be reviewed by the affected state for consistency with its federally approved coastal management program. Federal consistency regulations, 15 CFR Part 930, subpart I, outline this review process.

4.1 NOTIFICATION AND REVIEW PROCESS

Federal agencies, applicants or applicant agencies proposing activities listed above within the specified boundaries must notify the DCMP of the proposed activity. Notification shall comply with 15 CFR §930.57 and §930.58 as described in section 3.2.1 and 3.2.2 of this document. The DCMP has 30 days from receipt of the applicant's consistency certification and necessary data and information to notify the applicant if the action will be reviewed for consistency with Delaware's coastal management policies, as described in section 3.2.3 of this document.

4.2 CONCURRENCE WITH AN INTERSTATE CONSISTENCY CERTIFICATION

At the earliest practicable time, the DCMP shall notify the applicant and federal and/or state permitting agency whether it concurs or objects to the consistency certification. Concurrence shall be in writing. If the DCMP does not respond within six months from the commencement of review, concurrence shall be conclusively presumed. If a consistency determination has not been issued within 3 months following the commencement of review, the DCMP shall notify both the federal permitting agency and the applicant of the status of the matter and the basis for further delay.

4.3 OBJECTION TO AN INTERSTATE CONSISTENCY CERTIFICATION

The intent of Interstate consistency review is to foster early coordination between states and federal agencies and to establish a consistent review process. Through this process, the DCMP seeks formal notification of listed activities within the specified boundaries; to be provided the opportunity to review such projects; and to have any issues or concerns addressed through the consultation process.

In the event the DCMP objects to the consistency certification, it will accompany its objection with reasons and supporting information concerning each activity which the DCMP finds to be inconsistent with the management program. The objection will include a statement informing the applicant of the right of appeal to the Secretary of Commerce. Following receipt of a State agency objection, federal agencies may not issue any of the licenses or permits associated with the proposed activity.

4.4 APPLICABILITY

Activities Subject to Interstate Consistency Review:

The DCMP has determined that there are three categories of federal activities that warrant consideration through the provisions of interstate consistency: Dredging and Dredged Material Disposal, Offshore Alternative Energy Development, and Introduction of Non-native Shellfish. The following table provides more detail and identifies the locations of the activities subject to review:

4.4.1 Dredging and Dredged Material Disposal

- 4.4.1.1 Dredging, filling, mining, and excavation of 50,000 or more cubic yards, excluding beach nourishment projects

- 4.4.1.1.1 Applies to activities in New Jersey occurring below the high tide line of the Delaware River from the Commodore Barry Bridge south to the Delaware state line; and/or below the high tide line of the Delaware River and Bay from Artificial Island to Cape May
- 4.5.1.1.2 Applies to activities in Pennsylvania occurring below the high tide line of the Delaware River from the Commodore Barry Bridge south to Delaware state line.
- 4.4.1.2 Subsurface discharge of dredged and fill materials, relocation or redistribution of sediments of 50,000 or more cubic yards, excluding beach nourishment projects
 - 4.4.1.2.1 Applies to activities in New Jersey below the high tide line of the Delaware River from the Commodore Barry Bridge south to the Delaware state line; below the high tide line of the Delaware River and Bay from Artificial Island to Cape May, NJ; and/or confined upland disposal facilities with the capacity to handle at least 50,000 cubic yards of dredged material that discharge directly into Delaware River or Bay.
 - 4.4.1.2.2 Applies to activities in Pennsylvania occurring below the high tide line of the Delaware River from the Commodore Barry Bridge south to Delaware state line; and/or confined upland disposal facilities with the capacity to handle at least 50,000 cubic yards of dredged material that discharge directly into Delaware River.

4.4.2 Offshore Alternative Energy Development

- 4.4.2.1 Alternative Energy Development (i.e. siting, placement, construction and/ or decommissioning of wind, wave, and tidal energy capture technologies, excluding metrological towers and buoys)
 - 4.4.2.1.1 Applies to activities in New Jersey occurring within the Delaware River and Bay from Artificial Island to Cape May and State ocean waters from 0-3nmi, extending from Hereford Inlet south to the tip of Cape May.
 - 4.4.2.1.2 Applies to activities in Maryland occurring within State ocean waters from 0-3 nmi.

4.4.3 Introduction of Non-native Shellfish

- 4.4.3.1 Introduction of Non-native Shellfish involving placement of new substrate or manipulating existing substrate
 - 4.4.3.1.1 Applies to activities in New Jersey occurring within Delaware River and Bay from Artificial Island to Cape May
 - 4.4.3.1.2 Applies to activities in Maryland occurring within the Chesapeake Bay
 - 4.4.3.1.3 Applies to activities in Virginia occurring within the Chesapeake Bay

5.0 DELAWARE COASTAL MANAGEMENT PROGRAM POLICIES

5.1 WETLANDS MANAGEMENT

- 5.1.1 The productive public and private wetlands in the state shall be preserved and protected to prevent their despoliation and destruction consistent with the historic right of private ownership of lands. [7 Del. C. §6602]
- 5.1.2 Activities in or adjacent to wetlands shall be conducted so as to minimize wetlands destruction or degradation, to preserve the natural and beneficial values of wetlands, and to protect the public interest therein. [7 Del. C. §§6602, 6603(a)(2), 6119, 4001]
- 5.1.3 Each state agency shall minimize the adverse effects to freshwater wetlands and conserve and enhance the environmental values and functions of freshwater wetlands in carrying out the agency's responsibilities. [Delaware Executive Order 56, May 26, 1988]
- 5.1.4 Each state agency, to the extent permitted by law, shall avoid undertaking or providing financial assistance for construction located in freshwater wetlands which will substantially degrade or destroy for long or permanent duration the use and function of an altered area as a wetland environment, unless the head of the agency, through consultation with the DNREC, files written findings with DNREC that:
 - 5.1.4.1 There is no reasonable alternative to such construction, and that the proposed action includes all practicable measures to minimize undesirable impacts to freshwater wetlands which may result from such use, or
 - 5.1.4.2 That the request is consistent with the procedures and provisions of the following paragraph. In making this finding the head of the agency and DNREC may take into account social, economic, environmental and other pertinent factors. [Delaware Executive Order 56, May 26, 1988]
- 5.1.5 Any requests for new authorizations, appropriations, or grants of state operating or capital funds, or for state loan assistance or guarantees shall indicate, based on best available information, if an action to be proposed will be located in or will adversely affect freshwater wetlands, whether the proposed action is in accord with Delaware Executive Order Number 56. Delaware Executive Order 56, May 26, 1998]
- 5.1.6 When State-owned freshwater wetlands are proposed for lease, easement, right-of-way or disposal to non-state public or private parties, the State agency shall:
 - 5.1.6.1 Attach restrictions appropriate to Delaware Executive Order Number 56 to the uses of properties by the grantee or purchaser and any successor, except where prohibited by law; or
 - 5.1.6.2 Withhold such properties from disposal. [Delaware Executive Order 56, May 26, 1998]
- 5.1.7 Wetlands to be managed by the Department of Natural Resources and Environmental Control are those lands above the mean low water elevation any bank, marsh, swamp, meadow, flat or other low land subject to tidal action in the State, including those areas which are now or in this century have been connected to tidal waters, whose surface is at or below an elevation of 2 feet above local mean high water, and upon which may grow or

is capable of growing obligate or facultative wetland vegetation and those lands not currently used for agricultural purposes containing 400 acres or more of contiguous nontidal swamp, bog, muck or marsh exclusive of narrow stream valleys where fresh water stands most, if not all, of the time due to high water table, which contribute significantly to ground water recharge, and which would require intensive artificial drainage using equipment such as pumping stations, drain fields or ditches for the production of agricultural crops. [7 *Del. C.* §6603(h)]

- 5.1.8 The conservation and protection of non-tidal wetlands shall be given consideration in development of land acquisition plans and comprehensive land use development plans. [Delaware Executive Order 43, August 15, 1996; Delaware Executive Order 56, May 26, 1988; 22 *Del. C.* Ch. 7; 9 *Del. C.* §§2656, 4956, 6956]
- 5.1.9 Activities which may adversely affect wetlands shall require state approval pursuant to the policy statements below. The CMP, however, requires no such approval for the following activities: construction of foot bridges, duck blinds, wildlife nesting structures, boundary markers, or aids to navigation that do not prevent the ebb and flow of the tide; mosquito control activities authorized by the DNREC; and hunting, fishing, haying, trapping, and grazing of domestic animals. [7 *Del. C.* §§6604, 6606; 7 *Del. Admin. Code* 7502 §6.1.4]
- 5.1.10 In order to assure that any activity in the wetlands is appropriate, state approval shall be required prior to the initiation of such activities, except no such approval shall be required for the activities identified in policy statement number 5.1.9. The following factors shall be considered prior to such approval: the environmental impact of the proposed use; the number and type of supporting facilities required and their impact; the effect of the activity on neighboring land uses; the appropriate state and local comprehensive plans for the general area; the economic impact of the activity in terms of jobs, taxes generated, and land area required; and the aesthetic impact of the proposed activity. Alternative methods of construction shall also be considered prior to permit approval. [7 *Del. C.* §6604; 7 *Del. Admin. Code* 7502]
- 5.1.11 The cumulative impact of individual projects shall be considered when evaluating the environmental impacts of a proposed activity in wetlands. [Delaware Executive Order 43, August 15, 1996]
- 5.1.12 No permit will be issued to:
 - 5.1.12.1 Dredge any channel through the wetlands deeper than the existing depth or the control channel depth specified by the Corps of Engineers at the point of connection to the adjacent navigable waterway to which the dredge channel is directly connected. A lesser depth may be specified by the Secretary of the DNREC in furtherance of the purposes of the Act.
 - 5.1.12.2 Dredge any channel through the wetlands that has only one outlet to navigable water through which the normal daily tide ebbs and flows unless the channel is equipped, by aerators or other means, to maintain the Water Quality Standards for Streams that are issued by the DNREC.
 - 5.1.12.3 Dredge channels through wetlands with sides more nearly vertical than a slope that rises one foot vertically for each three feet of horizontal distance except where

conditions of soil composition prevent slope stabilization, so that bulkheading must be used.

5.1.12.4 Utilize wetlands for any activity unless it:

5.1.12.4.1 Requires water access for the central purpose of the activity; and

5.1.12.4.2 Has no alternative on adjoining non-wetland property of the owner.

5.1.12.5 Building bulkheads on wetlands higher in elevation than the surface of the natural land. Navigational aids that do not prevent the ebb and flow of the tide may be higher. [7 Del. Admin. Code 7502 §7]

5.2 BEACH MANAGEMENT

5.2.1 The public and private beaches of the State shall be preserved, protected, and enhanced to mitigate beach erosion and to prevent their destruction and despoliation. [7 Del. C. §§6801, 6803, 6810]

5.2.2 Publicly owned beaches and shorelines shall be managed and maintained to assure adequate and continued public access to these areas within the carrying capacity of the resource. [7 Del. C. §4701(c)]

5.2.3 Beaches are the areas from the Delaware/Maryland line at Fenwick Island to the Old Marina Canal north of Pickering Beach, which extends from the Mean High Water line of the Atlantic Ocean and Delaware Bay seaward 2,500 feet, and landward 1,000 feet. [7 Del. C. §6802(1)]

5.2.4 No person shall, without first having obtained a permit or letter of approval from the Department, undertake any activity:

5.2.4.1 To construct, modify, repair or reconstruct any structures or facility on any beach seaward of the building line.

5.2.4.2 To alter, dig, mine, move, remove or deposit any substantial amount of beach or other materials, or cause the significant removal of vegetation, on any beach seaward of the building line which may affect the enhancement, preservation or protection of beaches. [7 Del. C. §6805(a)]

5.2.5 Construction activities landward of the building line on any beach, including construction of any structure or the alteration, digging, mining, moving, removal or deposition of any substantial amount of beach or other materials, shall be permitted only under a letter of approval from the Department of Natural Resources and Environmental Control. [7 Del. C. §6805(c)]

5.2.6 The Department shall grant or deny a permit or letter of approval required by Policies 5.2.4 and 5.2.5 in accordance with duly promulgated regulations. If any structure proposed to be built in whole or in part seaward of the building line could reasonably be reduced in size or otherwise altered in order to eliminate or diminish the amount of encroachment over the building line, the Department shall require such reduction or alteration as a condition of granting the permit or letter of approval. [7 Del. C. §6805(d)]

- 5.2.7 By definition, the Building Line means a line generally paralleling the coast, set forth on maps prepared by the Division of Soil and Water Conservation with reference to the National Geodetic Vertical Datum (NGVD) and the Delaware State Plane Coordinate System, and based upon information provided by topographic surveys. The Building Line is located as follows:
- 5.2.7.1 Along beaches extending from the Delaware/Maryland line to the tip of Cape Henlopen - 100 feet landward of the adjusted seawardmost 10-foot elevation contour above NGVD;
 - 5.2.7.2 Along beaches extending from the tip of Cape Henlopen to the southernmost limit of Primehook Beach - 100 feet landward of the adjusted seawardmost 7-foot elevation contour above NGVD;
 - 5.2.7.3 Along beaches extending from the southernmost limit of Primehook Beach to the Old Marina Canal north of Pickering Beach - 75 feet landward of the adjusted seawardmost 7-foot elevation contour above NGVD; or at the landward limits of the beach, as defined in the Regulations Governing Beach Protection and the Use of Beaches dated December 27, 1983, whichever is most seaward. [Delaware Regulations Governing Beach Protection and the Use of Beaches, Part 1 - Definitions, revised December 27, 1983]
- 5.2.8 If a structure located seaward of the Building Line is completely destroyed, no person shall undertake any restoration or reconstruction of the destroyed structure before the Division issues the person a permit or letter of approval pursuant to the Regulations Governing Beach Protection and the Use of Beaches. [Delaware Regulations Governing Beach Protection and the Use of Beaches, Section 2.07, revised December 27, 1983]
- 5.2.9 All structures, devices and facilities existing now or in the future which are devoted to the enhancement, preservation and protection of beaches shall be managed by the Department of Natural Resources and Environmental Control. [7 *Del. C.* §6803(b)]
- 5.2.10 No person shall commence or conduct, without a permit therefore from the Division of Soil & Water Conservation, construction of any structure or facility on any beach seaward of the Building Line, the primary function of which is beach erosion control or shore protection including, but not limited to, groins, jetties, seawalls, revetments, dikes, bulkheads, and beach nourishment; except that ordinary dune maintenance, as determined by the Division, including the proper installation of sand fence and the planting and fertilization of stabilizing vegetation, shall not require a permit. [Delaware Regulations Governing Beach Protection and the Use of Beaches, Section 4.03, revised December 27, 1983]
- 5.2.11 No person shall commence or conduct without a permit therefore from the Division of Soil and Water Conservation, construction seaward of the Building Line, of any pipeline, dock, pier, wharf, ramp or other harbor work. [Delaware Regulations Governing Beach Protection and the Use of Beaches, Section 4.04, revised December 27, 1983]
- 5.2.12 If a structure is to be either constructed or reconstructed following the complete destruction of the original structure, and such a structure does not have to be located seaward of the Building Line in order to achieve its intended purpose, then such a structure shall be required to be located entirely landward of the Building Line. However, if the Division of Soil and Water Conservation determines that there is inadequate space

available entirely landward of the Building Line for the construction or reconstruction of a completely destroyed structure, said constructed or reconstructed structure shall be physically located as far landward as possible on the parcel of real property in question, taking into consideration all Federal, State and local laws, rules, regulations, and zoning and building ordinances. [Delaware Regulations Governing Beach Protection and the Use of Beaches, Section 2.08, revised December 27, 1983]

5.2.13 The following activities are prohibited:

- 5.2.13.1 The operation of any motorized vehicle or machine on, over or across the primary dune on any State-owned beach except at those locations specified by the Department for such use;
- 5.2.13.2 Pedestrian traffic on, over or across the primary dune on any State-owned beach except at those locations specified by the Department for such use;
- 5.2.13.3 The alteration, moving or removal of any facility, improvement or structure installed or maintained by the DNREC for enhancement, preservation or protection of any beach; and
- 5.2.13.4 The damaging, destruction or removal of any trees, shrubbery, beach grass or other vegetation growing on any State-owned or maintained beach seaward of the Building Line. [Delaware Regulations Governing Beach Protection and the Use of Beaches, Section 2.08, revised December 27, 1983]

5.2.14 State action to reduce shoreline recession on private beaches may be taken but only under the following conditions:

- 5.2.14.1 Where dangerous conditions exist on any privately owned beach which constitute an emergency; or
- 5.2.14.2 In those instances where owners of private beaches allow free public use of such beaches in return for the assistance; or
- 5.2.14.3 Whenever two thirds or more of the property owners in the project area along the private beach have petitioned the Department to undertake the work. [7 Del. C. §§6801, 6804, 6810]

5.2.15 To the maximum extent possible the following system of priorities shall be utilized for the expenditure of limited beach preservation funds:

- 5.2.15.1 First priority shall be given to those beaches which suffer substantial and chronic erosion due to the presence of public navigation works;
- 5.2.15.2 Second priority shall be given to those intensely used, publicly owned beaches undergoing critical erosion. This category will be subdivided further according to the degree of public use, ease of access, rate of erosion, value of the area to the economy, and possible beneficial effects protection efforts may have on downdrift Delaware beaches. Protection of private beachfront structures will not be an overriding consideration;
- 5.2.15.3 Third priority shall be given to all remaining publicly owned recreational beaches;
- 5.2.15.4 Fourth priority shall be given to intensely used, publicly accessible private beaches;
- 5.2.15.5 Fifth priority shall be given to sparsely used, publicly accessible beaches; and

- 5.2.15.6 The last priority shall be given to privately owned, restricted beaches. In fact, all beach protection funds and State disaster-related reconstruction aid shall be restricted unless and until the beaches are opened to public use. [Delaware Executive Order 43, August 15, 1996]
- 5.2.16 All bonds issued for beach preservation projects shall not be issued for a period longer than the expected useful life of the work being financed. [Delaware Executive Order 43, August 15, 1996]
- 5.2.17 Efforts shall be made to utilize shoreline erosion control methods that best provide for the conservation of aquatic nearshore habitat, maintain water quality, and avoid other adverse environmental effects. Non-structural erosion control methods are preferred. However, structural erosion control measures may be allowed where it can be shown, through a review of site conditions and generally accepted engineering standards, that nonstructural measures would be ineffective in controlling erosion. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.04, amended September 2, 1992]

5.3 COASTAL WATERS MANAGEMENT

5.3.1 GENERAL

- 5.3.1.1 The development and utilization of the land and water resources of the state shall be regulated to ensure that water resources are employed for beneficial uses and not wasted, to protect beneficial uses of water resources, and to assure adequate water resources for the future. [7 *Del. C.* §6001 (a)(2)(3)]
- 5.3.1.2 The water resources of the state shall be protected from pollution which may threaten the safety and health of the general public. [7 *Del. C.* §§6001 (a)(5), 6001 (c)(2)]
- 5.3.1.3 The coastal water resources of the state shall be protected and conserved to assure continued availability for public recreational purposes and for the conservation of aquatic life and wildlife. [7 *Del. C.* §6001(a)(4)]
- 5.3.1.4 It is the policy of the DNREC to maintain within its jurisdiction surface waters of the State of satisfactory quality consistent with public health and public recreation purposes, the propagation and protection of fish and aquatic life, and other beneficial uses of the water. [DNREC Regulations, Delaware Surface Water Quality Standards, Section 1.1, amended July 11, 2004]
- 5.3.1.5 The designated uses applicable to the various stream basins represent the categories of beneficial use of waters of the state which must be maintained and protected through application of appropriate criteria. Such uses shall include public water supply; industrial water supply; primary contact recreation involving any water-based form of recreation, the practice of which has a high probability for total body immersion or ingestion of water such as swimming and water skiing; secondary contact recreation involving a water-based form of recreation, the practice of which has a low probability for total body immersion or ingestion of water such as wading, boating and fishing; maintenance, protection and propagation of fish, shellfish, aquatic life and wildlife preservation; agricultural

water supply; and waters of exceptional recreational or ecological significance (ERES waters). [Delaware Surface Water Quality Standards, Sections 2 and 3, amended July 11, 2004]

- 5.3.1.6 Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. Degradation of water quality in such a manner that results in reduced number, quality, or river or stream mileage of existing uses shall be prohibited. Degradation shall be defined for the purposes of this section as a statistically significant reduction, accounting for natural variations, in biological, chemical, or habitat quality as measured or predicted using appropriate assessment protocols. [Delaware Surface Water Quality Standards, Section 5.1, amended July 11, 2004]
- 5.3.1.7 Where the quality of the waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that water quality shall be maintained and protected. In the case of ERES waters, existing quality shall be maintained or enhanced. Limited degradation may be allowed if the DNREC finds, after review, that allowing lower water quality would result in a substantial net environmental or public health benefit and does not impede existing uses in the area in which the waters are located while allowing for full protection of existing uses. [Delaware Surface Water Quality Standards, Sections 2 and 5.2, amended July 11, 2004]
- 5.3.1.8 Where high quality waters constitute an outstanding national resource, such as waters of national parks and wildlife refuges, existing quality shall be maintained and protected. [Delaware Surface Water Quality Standards, Section 5.3, amended July 11, 2004]
- 5.3.1.9 In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with Section 316 of the Water Quality Act of 1987. [Delaware Surface Water Quality Standards, Section 5.4, amended July 11, 2004]
- 5.3.1.10 All surface waters of the State shall be free from substances that are attributable to wastes of industrial, municipal, agricultural or other human-induced origin. Examples include but are not limited to the following:
 - 5.3.1.10.1 Floating debris, oil, grease, scum, foam, or other materials on the water surface that may create a nuisance condition, or that may in any water interfere with attainment and maintenance of designated uses of the water.
 - 5.3.1.10.2 Setttable solids, sediments, sludge deposits, or suspended particles that may coat or cover submerged surfaces and create a nuisance condition, or that may in any way interfere with attainment and maintenance of designated uses of the water.
 - 5.3.1.10.3 Any pollutants, including those of a thermal, toxic, corrosive, bacteriological, radiological, or other nature that may interfere with attainment and maintenance of designated uses of the water, may impart undesirable odors, tastes, or colors to the water or to aquatic life found therein, may endanger public health, or may result in dominance of

nuisance species. [Delaware Surface Water Quality Standards, Section 4.1, amended July 11, 2004]

- 5.3.1.11 Regulatory mixing zones shall not impinge upon areas of special importance, including but not limited to drinking water supply intakes, nursery areas for aquatic life or waterfowl, approved or conditional shellfish areas or heavily utilized primary contact recreation areas. Zones shall not be located in such a manner as to interfere with passage of fishes or other organisms. Shorehugging plumes should be avoided to the maximum extent practicable. In areas where multiple discharges are located in proximity, overlapping discharge plumes may occur. In such instances, the thermal mixing zone, which is not to exceed 25% of the cross-sectional area of the receiving water as measured from the point of discharge to the opposite shore, may be reduced to preclude acute toxicity in the overlap areas, or to ensure an adequate zone of passage for fish. [Delaware Surface Water Quality Standards, Section 6.2, amended July 11, 2004]
- 5.3.1.12 Streams with a designated use of public water supply shall provide waters of acceptable quality for use for drinking, culinary or food processing purposes after application of approved treatment equivalent to coagulation, filtration, and disinfection (with additional treatment as necessary to remove naturally occurring impurities). Water shall be free from substances (except natural impurities) that, alone or in combination with other substrates, result in:
 - 5.3.1.12.1 Unacceptable levels of taste or odor in the treated water;
 - 5.3.1.12.2 Significant disruption of the treatment processes at the treatment facility;
or
 - 5.3.1.12.3 Concentrations of toxic substances in the treated water that may be harmful to human health. [State of Delaware Surface Water Quality Standards, Section 4.2, amended July 11, 2004]
- 5.3.1.13 Designated exceptional recreational or ecological significance (ERES) waters shall be accorded a level of protection and monitoring in excess of that provided most other waters of the State. These waters are recognized as special natural assets of the State, and must be protected and enhanced for the benefit of present and future generations of Delawareans. [Delaware Surface Water Quality Standards, Section 5.6.1.1, amended July 11, 2004]
- 5.3.1.14 ERES waters shall be restored, to the maximum extent practicable, to their natural condition. To this end, the DNREC shall, through adoption of a pollution control strategy for each ERES stream basin, take appropriate action to cause the systematic control, reduction, or removal of existing pollution sources, and the diversion of new pollution sources, away from ERES waters. [Delaware Surface Water Quality Standards, Section 5.6.1.2, amended July 11, 2004]
- 5.3.1.15 The discharge of oil from a vessel, truck, pipeline, storage, tank or tank car which causes or poses a threat of making a film on, emulsion in or sludge beneath the waters of the state or its shoreline shall be prohibited. [7 Del. C. §§6203, 6202(7)(5)(9)]

- 5.3.1.16 At a minimum, any discharge of liquid waste - sewage, industrial waste or other waste to State waters shall be subject to effluent limitations, discharge requirements and any alternate effluent control strategy that reflect a practicable level of pollutant removal technology. For the purposes of this section, a practicable level of pollutant removal technology is defined as the application of "best" treatment technology, control measures and practices, including pollution prevention, available to prevent, manage, reduce or remove pollutants taking into account the cost of applying such technology, control measures or practices in relation to the effluent reduction benefits to be achieved, the age of equipment and facilities involved, the process(es) employed, the engineering aspects of applying the various types of control, process changes, pollution prevention measures, non-water quality impacts (e.g. energy requirements) and other factors deemed appropriate. For the parameters, BOD5 (5-day biochemical oxygen demand) and suspended solids, the degree of removal reflecting an application of a practicable level of pollutant removal technology shall be at least 85% of the BOD5 and suspended solids contained in the influent to the treatment works or prior to application of the removal technology, control measures or practices. For discharges of sewage to State waters, a practicable level of pollutant removal technology shall be secondary treatment and disinfection.
- 5.3.1.16.1 No person shall cause or permit any discharge of liquid waste to the Delaware River, the Delaware Bay, or Atlantic Ocean except liquid waste which has received at least secondary treatment and disinfection.
- 5.3.1.16.2 No person shall cause or permit discharge of liquid waste to a lake or a pond or any tributary thereof, except liquid waste which has received at least secondary treatment, filtration, nutrient removal and disinfection.
- 5.3.1.16.3 No person shall cause or permit any discharge of liquid waste to the Little Assawoman Bay, Indian River Bay, or to Rehoboth Bay, including any tributaries to those waterbodies, except liquid waste which has received at least secondary treatment, filtration, and disinfection.
- 5.3.1.16.4 No person shall cause or permit any discharge of liquid waste to a stream, tidal or non-tidal, except liquid waste which has received at least secondary treatment, filtration, and disinfection. This subsection shall not govern discharge into the Delaware River, the Delaware Bay or the Atlantic Ocean, which shall be governed by subparagraph (a) hereof 5.3.1.16.1. For existing facilities, filtration may not be required if the existing facility has demonstrated the ability to continuously meet secondary treatment levels. [Delaware Regulations Governing the Control of Water Pollution, Section 7.01 and 7.02 amended February 11, 2006]
- 5.3.1.17 In the event that Delaware Surface Water Quality Standards are not achieved through application of the technology based requirements, additional effluent limitations and treatment requirements shall be imposed to assure compliance with the Surface Water Quality Standards. Such additional effluent limitations and treatment requirements must control all pollutants or pollutant parameters which the DNREC determines are or may be discharged at a level which will cause, have the reasonable potential to cause or significantly contribute to an excursion of any numerical or narrative water quality criterion contained within Delaware's Surface Water Quality Standards. The need for additional effluent limitations and treatment requirements shall be based upon the results of chemical and/or

biological tests in conjunction with studies or analyses designed to assess the potential of the discharge to cause or contribute to in-stream excursions of Delaware's Surface Water Quality Standards. [Delaware Surface Water Quality Standards, Section 8.01, amended July 11, 2004]

- 5.3.1.18 Where conflicts develop between stated surface water uses, stream criteria, or discharge criteria, designated uses for each segment shall be paramount in determining the required stream criteria, which, in turn, shall be the basis of specific discharge limits or other necessary controls. [Delaware Surface Water Quality Standards, Section 1.2, amended July 11, 2004]
- 5.3.1.19 No person shall, without first having obtained a permit from the Delaware Department of Natural Resources, undertake any activity:
 - 5.3.1.19.1 In a way which may cause or contribute to the discharge of an air contaminant;
 - 5.3.1.19.2 In a way which may cause or contribute to the discharge of a pollutant into any surface or ground water;
 - 5.3.1.19.3 In a way which may cause or contribute to withdrawal of ground water or surface water or both;
 - 5.3.1.19.4 In a way which may cause or contribute to the collection, transportation, storage, processing or disposal of solid wastes, regardless of the geographic origin or source of such solid wastes;
 - 5.3.1.19.5 To construct, maintain or operate a pipeline system including any appurtenances such as a storage tank or pump station;
 - 5.3.1.19.6 To construct any water facility; or
 - 5.3.1.19.7 To plan or construct any highway corridor which may cause or contribute to the discharge of an air contaminant or discharge of pollutants into any surface or ground water. [7 Del. C. § 6003(a)]
- 5.3.1.20 No person shall, without first having obtained a permit from the Delaware Department of Natural Resources and Environmental Control, construct, install, replace, modify or use any equipment or device or other article:
 - 5.3.1.20.1 Which may cause or contribute to the discharge of an air contaminant;
 - 5.3.1.20.2 Which may cause or contribute to the discharge of a pollutant into any surface or ground water;
 - 5.3.1.20.3 Which is intended to prevent or control the emission of air contaminants into the atmosphere or pollutants into surface or ground waters;
 - 5.3.1.20.4 Which is intended to withdraw ground water or surface water for treatment and supply; or
 - 5.3.1.20.5 For disposal of solid waste. [7 Del. C. §6003(b)]
- 5.3.1.21 Regulatory variances for the activities identified in the preceding policy statement may be granted pursuant to 7 Del. C. §6011 if all of the following conditions exist in the opinion of the Secretary of the Delaware Department of Natural Resources and Environmental Control:

- 5.3.1.21.1 Good faith efforts have been made to comply with these policies;
- 5.3.1.21.2 The cost of compliance is disproportionately high with respect to the benefits which would be bestowed by compliance, or the necessary technology is unavailable;
- 5.3.1.21.3 Available alternative operating procedures or interim control measures are being or will be used to reduce adverse impacts; and
- 5.3.1.21.4 The activities are necessary to the national security or to the lives, health, or welfare of the occupants of Delaware. [7 *Del. C.* §6011(b)]
- 5.3.1.22 No permit for the activities identified above shall be granted unless the activities are consistent with county and municipal zoning regulations. [7 *Del. C.* §6003(c)(1)]
- 5.3.1.23 No person or entity shall commence construction, replacement, or operation of any of the following without first having obtained a permit from DNREC:
 - 5.3.1.23.1 Sewer;
 - 5.3.1.23.2 Any liquid waste collection or conveyance facilities such as waste water pump stations and force mains;
 - 5.3.1.23.3 Liquid waste treatment facilities;
 - 5.3.1.23.4 Any surface impoundment for liquid waste; or
 - 5.3.1.23.5 Any bulk storage, bulk transfer or pipeline facility. [Delaware Regulations Governing the Control of Water Pollution, Sections, 2.21, 2.22, 2.49, 2.64, 2.97 and 4.02, amended February 11, 2006]
- 5.3.1.24 No person shall construct, install, modify, rehabilitate, or replace an on-site wastewater treatment and disposal system or construct or place any dwelling, building, mobile home, manufactured home or other structure capable of discharging wastewater on-site unless such person has a valid license and permit issued by the DNREC. [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.020000, amended April 11, 2005]
- 5.3.1.25 No person shall cause or permit to be discharged, thrown, or dumped into any waters or any drainage ditch in the State any garbage, refuse, dead animal, poultry, trash, carton, bottle, container, box, lumber, timber, paper, or light material or other solid waste. [Delaware Regulations Governing the Control of Water Pollution, Section 3.02(f), amended February 11, 2006]
- 5.3.1.26 No person or entity shall:
 - 5.3.1.26.1 Engage in the drilling, boring, coring, driving, digging, construction, installation, removal, or repair of a water well or water test well, except as or under the supervision of a licensed water well contractor;
 - 5.3.1.26.2 Construct, repair, install or replace any part of a septic tank system except by or under the supervision of a licensed septic tank installer; or
 - 5.3.1.26.3 Operate any liquid waste treatment system without a licensed liquid waste treatment plant operator.

- 5.3.1.26.4 No permits or licenses shall be issued for these activities unless the DNREC finds that the applicant is prepared and willing to conduct such activities in a manner which is consistent with the CMP policies. [7 *Del. C.* §6023; Delaware Executive Order 43, August 15, 1996]
- 5.3.1.27 The person who has caused the contamination of a person's drinking water supply by contaminant other than bacteria, viruses, nitrate or pesticides, may be required to provide, at no cost to each person who has had his drinking water supply contaminated, an interim water supply that is of a quality and quantity to meet said person's needs as shall be determined by the Secretary of DNREC, in addition to the dates on which the interim water supply shall commence and be terminated. [7 *Del. C.* §6037]
- 5.3.1.28 No permits shall be issued for the discharge of any radiological, chemical or biological warfare agents or high-level radioactive wastes into State waters. [Delaware Regulations Governing the Control of Water Pollution, Section 3.02(h)(1), amended February 11, 2006]
- 5.3.1.29 No person shall cast, put, place, discharge in or permit or suffer to be cast, put, placed, discharged in or to escape into any running stream of water within the limits of this State, from which stream the inhabitants of any borough, town or city within this State are supplied wholly or in part with water for and as drink or beverage, any dye-stuffs, drugs, chemicals or other substance or matter of any kind whatsoever whereby the water so supplied as and for a drink or beverage is made and becomes noxious to the health or disagreeable to the senses of smell or taste. [16 *Del. C.* §1301]
- 5.3.1.30 Water delivered to every consumer by any public water supplier shall be so protected by natural means, by proper constructions or by treatment so as maintain or increase water quality above the level determined to be safe and not to negatively impact users of water from such systems, either directly or indirectly. [Delaware Regulations Governing Public Drinking Water Systems, Section 3.3, amended December 1, 2005]
- 5.3.1.31 After July 1, 1991, unless a particular activity is exempted by these regulations, a person may not disturb land without an approved sediment and stormwater management plan from the appropriate plan approval agency. [Delaware Sediment and Stormwater Regulations, Section 8(1), amended April 11, 2005]
- 5.3.1.32 The following activities are exempt from both sediment control and stormwater management requirements:
- 5.3.1.32.1 Agricultural land management practices, unless the local Conservation District or the DNREC determines that the land requires a new or updated soil and water conservation plan, and the owner or operator of the land has refused either to apply to a Conservation District for the development of such a plan, or to implement a plan developed by a Conservation District;
- 5.3.1.32.2 Developments or construction that disturbs less than 5,000 square feet.

- 5.3.1.32.3 Land development activities which are regulated under specific State or federal laws which provide for managing sediment control and stormwater runoff, such as specific permits required under the National Pollutant Discharge Elimination System (NPDES) when discharges are a combination of stormwater and industrial or domestic wastewater.
- 5.3.1.32.4 Projects which are emergency in nature that are necessary to protect life or property such as bridges, culvert, or pipe repairs and above ground or underground electric and gas utilities or public utility restoration; and
- 5.3.1.32.5 Qualifying commercial forest harvesting operations. [Delaware Sediment and Stormwater Regulations, Section 3.1 amended April 11, 2005]
- 5.3.1.33 A project may be eligible for a waiver of stormwater management for both quantitative and qualitative control if the applicant can demonstrate that:
 - 5.3.1.33.1 The proposed project will return the disturbed area to a pre-development runoff condition and the pre-development land use is unchanged at the conclusion of the project;
 - 5.3.1.33.2 The proposed project consists of a linear disturbance of less than ten (10) feet in width;
 - 5.3.1.33.3 The project is for an individual residential detached unit or agricultural structure, and the total disturbed area of the site is less than one acre; or
 - 5.3.1.33.4 The proposed project is for agricultural structures in locations included in current soil and water conservation plans that have been approved by the appropriate Conservation District. [Delaware Sediment and Stormwater Regulations, Section 3.2.1, amended April 11, 2005]
- 5.3.1.34 All sediment and stormwater management plans shall be designed to implement water quality control measures to minimize, to the maximum extent possible, degradation of downstream water quality and habitat. Unless a particular activity is exempt, no person may disturb land without an approved sediment and stormwater management plan. Delaware Sediment and Stormwater Regulations, Section 10.2.2, amended April 11, 2005]
- 5.3.1.35 Water quantity control is an integral component of overall stormwater management. Controls of peak discharges will, to some extent, prevent increases in flooding. The following design criteria for peak flow control are established for water quantity control purposes, unless a waiver is granted based on a case-by-case basis:
 - 5.3.1.35.1 Projects in New Castle County that are located north of the Chesapeake and Delaware Canal shall not exceed the post-development peak discharge for the 2, 10, and 100 year frequency storm events at the pre-development peak discharge rates for the 2, 10, and 100 year frequency storm events.
 - 5.3.1.35.2 Projects in New Castle County that are located south of the Chesapeake and Delaware Canal, Kent County, and Sussex County shall not exceed the post-development peak discharge for the 2 and 10 year frequency storm events at the pre-development peak discharge rates for the 2 and 10 year frequency storm events.

- 5.3.1.35.3 Watersheds, other than Designated Watersheds or Subwatersheds that have well documented water quantity problems may have more stringent or modified design criteria that are responsive to the specific needs of that watershed. Modified criteria for that watershed must receive Departmental approval, and all projects reviewed and approved by the appropriate plan approval agency shall meet or exceed the modified criteria. Proposed modification of criteria for a watershed shall be subject to public review and comment prior to implementation. [Delaware Sediment and Stormwater Regulations, Section 10.3.4, amended April 11, 2005]
- 5.3.1.36 Water quality control is also an integral component of stormwater management. Control of water quality on-site will prevent further degradation of downstream water quality. The following design criteria are established for water quality protection unless a waiver or variance is granted on a case-by-case basis.
- 5.3.1.36.1 In general, the preferred option for water quality protection shall be those practices collectively referred to as “Green Technology BMP’s”. Other practices shall be considered only after preferred practices have been eliminated for engineering or hardship reasons as approved by the appropriate plan approval agency.
- 5.3.1.36.2 Water quality practices shall be designed to manage the rate and volume of flow from the 2.0” NRCS Type II rainfall event, up to a maximum of 1.0”
- 5.3.1.36.3 Alternative stormwater quality practices may be acceptable to the Department and/or the plan approval agency if the removal efficiency for suspended solids meets or exceeds 80% as demonstrated by scientifically independent evaluation and monitoring performance data,
- 5.3.1.36.4 The Department and/or plan approval agency may require other acceptable stormwater practices if a receiving waterbody has been identified as impaired or designated with a specific pollutant reduction target.
- 5.3.1.36.5 Water quality practices may also be acceptable to the Department and/or the plan approval agency if they are designed to reduce pollutant loading from a specific post-development source. [Delaware Sediment and Stormwater Regulations, Section 10.3.5(1)(2)(3)(4)(5), amended April 11, 2005]

5.3.2 MARINAS

- 5.3.2.1 Marina owners/operators for marinas that are located in whole or in part on tidal waters of the State, and that provide dockage for vessels with a portable toilet(s) or Type III marine sanitation device(s) (MSD), shall provide convenient access, as determined by the DNREC, to an approved, fully operable and well maintained pumpout facility(ies) and/or dump station(s) for the removal of sewage from said vessels to a DNREC approved sewage disposal system.
- 5.3.2.1.1 Owners/operators may agree to pool resources for a single pumpout dump station with Departmental approval based on criteria of number and class of vessels, marina locations, cost per pumpout use, and ultimate method of

- sewage treatment and disposal (i.e. septic system or waste water treatment facility).
- 5.3.2.1.2 The owner/operator of any boat docking facility that is located in whole or in part on tidal waters of the State, and that provides dockage for a live-aboard vessel(s) with a Type III marine sanitation device(s), shall install and maintain at all times, in a fully operable condition, an approved dedicated pumpout facility at each live-aboard vessel slip for the purpose of removing sewage from the live-aboard vessel on a continuous or automatic, intermittent basis to a DNREC approved sewage disposal system.
 - 5.3.2.1.3 Any discharge, by any means, of untreated or inadequately treated vessel sewage into or upon the waters of any marina, boat docking facility or tidal water of the State of Delaware is prohibited.
 - 5.3.2.1.4 All vessels while on waters of the State of Delaware shall comply with 33 USC 1322, as amended February 4, 1987. [7 Del. C. §6035 (a) and (b)(1, 2, 3, & 4), Adopted June 23, 1992]
 - 5.3.2.2 No person shall construct, install, modify, rehabilitate, or replace a marina unless such person has a valid marina permit issued by the DNREC. [Delaware Marina Regulations, Section I (B)(5)(a), revised February 22, 1993]
 - 5.3.2.3 It is the policy of DNREC to prevent degradation of the surface and groundwaters of the State which might result from any pollutant source, so that all existing water designated uses are maintained and protected. Marinas shall be permitted only if they do not cause a violation of established Delaware water quality regulations either within the marina, or in adjacent ambient waters which mix or are contacted by waters from the marina. To achieve this goal:
 - 5.3.2.3.1 These regulations set forth rebuttable presumptions that:
 - 5.3.2.3.1.1 Land-based alternatives for non-water dependent activities are available.
 - 5.3.2.3.1.2 Alternatives that do not involve the use of state waters for storage of boats have less adverse impact on the aquatic environment, and
 - 5.3.2.3.1.3 Alternatives that do not involve the use of state waters for storage of boats are available.
 - 5.3.2.3.2 Marinas shall be designed to maximize flushing so as to prevent the possible accumulation of contaminants that could result in a violation of the Delaware Surface Water Quality Standards, and to meet the policy objectives as set forth above. [Delaware Marina Regulations, Section II (C)(1)(D)(2)(a)(E)(1)(a), revised February 22, 1993]
 - 5.3.2.4 It is the policy of the State to preserve and protect public and private wetlands and to prevent their despoliation and destruction consistent with the historic right of private ownership of lands. Therefore, the Department shall strictly regulate the location of marinas in wetlands. Marinas shall be limited to those sites where short and long-term adverse impacts to the biological, chemical, and physical integrity of wetlands and their functions have been avoided, and that unavoidable impacts have been minimized and can be compensated for. Before disturbance of

wetlands shall be permitted, the applicant shall demonstrate that all practicable alternatives to avoiding wetland impacts have been thoroughly examined and the results of such examinations shall be provided to the DNREC. In all cases, the applicant shall demonstrate that the purchase of additional property to avoid the wetland impacts is impracticable. [Delaware Marina Regulations, Section II (D)(4)(b), revised February 22, 1993]

- 5.3.2.5 Measures must be taken to first avoid, and then minimize unavoidable impacts to shellfish resources. The following impacts of marina facilities on shellfish resources will be considered:
 - 5.3.2.5.1 Impacts on the organisms themselves, including their ability to survive, grow and propagate, without regard to potential use by humans;
 - 5.3.2.5.2 Impacts that do not adhere to strict environmental safeguards for water quality; and
 - 5.3.2.5.3 Impacts on the public's ability to harvest and consume edible shellfish species based upon the shellfish growing area classification proposed by the Delaware Division of Public Health for the marina or marina alteration under consideration. [Delaware Marina Regulations, Section II(D)(5), revised February 22, 1993]
- 5.3.2.6 Marinas shall not be permitted in areas that will result in the destruction of submerged aquatic vegetation beds without corresponding compensation measures as approved by the DNREC. [Delaware Marina Regulations, Section II (D)(6)(a), revised February 22, 1993]
- 5.3.2.7 Dredging shall be limited to the minimum dimensions necessary for the project and shall avoid sensitive areas such as wetlands, shellfish resources, and submerged aquatic vegetation. Delaware Surface Water Quality Standards must not be violated because of dredging operations, excluding whatever temporary and minimal turbidity is unavoidable when using sound dredging practices. Marinas shall only be located in areas which, in the determination of the Department, offer safe and convenient access to waters of navigable depth. Such locations tend to present maximum opportunities for flushing, with less danger of sedimentation than very shallow sites. Safe and convenient access will be determined on a case-by-case basis. Factors such as existing water depths, distance to existing channels and their depths, and tidal and wave action will be considered. [Delaware Marina Regulations, Section II E)(2)(a)(4)(a), revised February 22, 1993]
- 5.3.2.8 Benthic resources are protected because of their importance in the food chain and their value as commercial and recreational food sources. The status of a benthic community must be assessed by the applicant using frequency, diversity, and abundance measures approved by the DNREC. The DNREC may modify this methodology as experience is gained in applying certain techniques in Delaware waters. The DNREC may require monitoring of the benthos as a permit condition. [Delaware Marina Regulations, Section II (D)(7), revised February 22, 1993]

- 5.3.2.9 Construction of marinas shall not be permitted at sites that are recognized by the DNREC as critical habitats. "Critical Habitat" includes areas classified by the DNREC and serving an essential role in the maintenance of sensitive species. Areas may include unique aquatic or terrestrial ecosystems that support rare endangered or threatened plants and animals. Rare, endangered or threatened species are defined by both state and/or federal listings. [Delaware Marina Regulations, Section II(D)(8) revised February 22, 1993; Delaware Regulations Governing the Use of Subaqueous Lands Definitions (9), amended September 2, 1992.]

5.4 SUBAQUEOUS LANDS AND COASTAL STRIP MANAGEMENT

- 5.4.1 The "coastal zone", referred to in these policies as the "coastal strip", is defined as all that area of the State, whether land, water or subaqueous land between the territorial limits of Delaware in the Delaware River, Delaware Bay and Atlantic Ocean, and a line formed by certain Delaware highways and roads. [7 *Del. C.* §7002]
- 5.4.2 The natural environment of the coastal strip shall be protected from the impacts of heavy industry and oil pollution for the purpose of recreation, tourism, fishing, crabbing, and gathering other marine life useful in food production. [7 *Del. C.* §§7001, 6201]
- 5.4.3 The need for protection of the natural environment in the coastal strip shall be balanced with the need for new industry in the State's coastal areas. [7 *Del. C.* §7001]
- 5.4.4 The location, extent and type of industrial development in the coastal strip that result in the degradation of the Delaware's bays and coastal areas shall be controlled [7 *Del. C.* §7001; *Kreshtool v. Delmarva Power & Light Co.*, Delaware Super., 310 A. 2d 649(1973)]
- 5.4.5 The development and use of offshore oil, gas, and other mineral resources of the state shall be managed to make the maximum contribution to the public benefit and so as to balance their utilization, conservation, and protection [Delaware Oil, Gas and Mineral Exploration Regulations, 2.1, adopted September, 1971]
- 5.4.6 New heavy industrial uses shall be prohibited in the coastal strip. Such uses are ones characteristically involving more than 20 acres, and characteristically employing smokestacks, tanks, distillation or reaction columns, chemical processing equipment or waste-treatment lagoons. Heavy industrial uses shall not only be defined by their physical characteristics, however, but also by their potential to pollute in the event of human error or equipment failure. Examples of heavy industry are oil refineries, basic steel manufacturing plants, basic cellulosic pulp-paper mills, and chemical plants such as petrochemical complexes. For purposes of this policy, public sewage treatment or recycling plants shall not be deemed heavy industrial uses. [7 *Del. C.* §§7002(e), 7003; *Kreshtool v. Delmarva Power & Light Co.*, Delaware Super., 310 A. 2d 649(1973)]
- 5.4.7 New manufacturing uses or the expansion of existing manufacturing uses shall be allowed in the coastal strip by permit only, although in no case shall new manufacturing uses be allowed in wetlands or where inconsistent with local zoning regulations. Manufacturing uses are ones which mechanically or chemically transform substances into new products, and characteristically employ power-driven machines and materials handling equipment. Manufacturing uses typically include establishments engaged in assembling components

of manufactured products, provided the new products are not fixed improvements. [7 *Del. C.* §7002(d)(e), 7004(a)]

- 5.4.8 The following factors shall be considered in passing on requests for permission to construct or operate a manufacturing use in the coastal strip:
- 5.4.8.1 Environmental impact, including but not limited to, probable air and water pollution likely to be generated by the proposed use under normal operating conditions, as well as during mechanical malfunction and human error; likely destruction of wetlands and flora and fauna; impact of site preparation on drainage of the area in question, especially as it relates to flood control; impact of site preparation and facility operations on land erosion; effect of site preparation and facility operations on the quality and quantity of surface, and subsurface water resources, such as the use of water for processing, cooling, effluent removal, and other purposes; in addition, but not limited to, the likelihood of generation of glare, heat, noise, vibration, radiation, electromagnetic interference and obnoxious odors.
 - 5.4.8.2 Economic effect, including the number of jobs created and the income which will be generated by the wages and salaries of these jobs in relation to the amount of land required, and the amount of tax revenues potentially accruing to state and local government.
 - 5.4.8.3 Aesthetic effect, such as impact on scenic beauty of the surrounding area.
 - 5.4.8.4 Number and type of supporting facilities required and the impact of such facilities on all factors listed in this subsection.
 - 5.4.8.5 Effect on neighboring land uses including, but not limited to, effect on public access to tidal waters, effect on recreational areas, and effect on adjacent residential and agricultural areas.
 - 5.4.8.6 County and municipal comprehensive plans for the development and/or conservation of their areas of jurisdiction. [7 *Del. C.* §7004(b)]
- 5.4.9 New offshore gas, liquid, or solid bulk product transfer facilities shall be prohibited in the coastal strip. Such facilities are docks or port facilities, whether artificial islands or attached to shore by any means, for the transfer of bulk quantities of any substance from vessel to onshore facility or vice versa. However, a docking facility or pier for a single industrial or manufacturing facility and docking facilities located in the City of Wilmington for the Port of Wilmington shall not be prohibited. [7 *Del. C.* §§7002(f), 7003; Inf. Attorney General Opinion No. 65, October 22, 1974]
- 5.4.10 Offshore pipelines which transfer bulk quantities of gas, oil, or other liquids to terminals within the coastal strip shall be prohibited. Such pipelines generally shall be allowed if they transit the coastal strip and environmental safeguards are observed. However, if such pipelines represent a significant danger of pollution to the coastal strip or generate pressure for construction of industrial plants in the coastal strip, they shall be prohibited. [Authority - 7 Delaware Code [7 *Del. C.* §§7001, 7002, 7003; Inf. Attorney General Opinion No. 77-33, July 6, 1977]
- 5.4.11 A permit may be issued for geological, geophysical and seismic surveys, including the taking of cores and other samples, or the tide and submerged lands of this State. Such

permits shall be nonexclusive and shall not give any preferential rights to any oil, gas and sulfur or other mineral lease. After consultation with those agencies of the State having an interest in the possible effects of the leasing, such rules and regulations deemed necessary to protect the fish, game, wildlife and natural resources of the State shall be included in the permit. Survey activities on any area determined to be an area where a lease should not be granted may be prohibited. The permit shall include conditions and payment proper to safeguard the interests of the State. [7 *Del. C.* §§6103, 6104]

- 5.4.12 No operations or activities shall be commenced on the drilling, deepening or plugging back of any offshore oil or gas wells located on underwater lands of Delaware without the permission of the state, and unless the activities are conducted in a manner which do not result in the degradation of the State's natural resources. [Delaware Oil, Gas and Mineral Exploration Regulations Numbers I-V, September 1971]
- 5.4.13 Easements for mineral exploration and exploitation underlying that part of the surface of the Atlantic shore owned by the state shall be permitted at such times and places as necessary to permit the extraction and transportation of oil, gas, sulfur or other minerals from state, federal or private lands, but permanent interference with the surface of the Atlantic shore shall be prohibited. [7 *Del. C.* §6102(d), 6118, 6119(a)]
- 5.4.14 Before offering tide and submerged lands for leasing for possible mineral development, or whenever any person files a written application with the Secretary of DNREC requesting that lands be offered for leasing, accompanying the same with the required fee, a public hearing may be held. After the public hearing, the Secretary shall determine it will be determined whether an invitation for bidding to lease the area under consideration would be in the public interest. Consideration shall be made as to whether a lease or leases of the area under consideration would:
 - 5.4.14.1 Be detrimental to the health, safety, or welfare of persons residing in, owning real property or working in the neighborhood of such areas;
 - 5.4.14.2 Interfere with the residential or recreation areas to an extent that would render such areas unfit for recreational or residential uses or unfit for park purposes;
 - 5.4.14.3 Destroy, impair or interfere with the aesthetic and scenic values of the Delaware coast, or other affected area;
 - 5.4.14.4 Create any air, water and other pollution;
 - 5.4.14.5 Substantially endanger marine life or wildlife;
 - 5.4.14.6 Substantially interfere with commerce or navigation; and
 - 5.4.14.7 Protect state lands from drainage of oil, gas or other minerals or objectionable substances. [7 *Del. C.* §§6107, 6108]
- 5.4.15 Avoidable pollution or avoidable contamination of the ocean and of the waters covering submerged lands, avoidable pollution or avoidable contamination of the beaches or land underlying the ocean or waters covering submerged lands, or any substantial impairment of and interference with the enjoyment and use thereof, including but not limited to bathing, boating, fishing, fish and wildlife production, and navigation, shall be prohibited and the lessee shall exercise a high degree of care to provide that no oil, tar, residuary product of oil or any refuse of any kind from any well or works shall be permitted to be

deposited on or pass into the waters of the ocean, any bay or inlet thereof, or any other waters covering submerged lands; provided, however, that this policy does not apply to the deposit on, or passing into, such water or waters not containing any hydrocarbons or vegetable or animal matter. [7 Del. C. §6119(a)]

- 5.4.16 For the purposes of this section, "avoidable pollution" or "avoidable contamination" means pollution or contamination arising from:
 - 5.4.16.1 The acts of omissions of the lessee or its officers, employees or agents; or
 - 5.4.16.2 Events that could have been prevented by the lessee or its officers, employees or agents through the exercise of a high degree of care. [7 Del. C. §6119(b)]
- 5.4.17 State subaqueous lands within the boundaries of Delaware constitute an important resource of the State and shall be protected against uses or changes which may impair the public interest in the use of tidal or nontidal waters. [7 Del. C. Ch. 72]
- 5.4.18 No person shall deposit material upon or remove or extract materials from, or construct, modify, repair or reconstruct, or occupy any structure or facility upon submerged lands or tidelands without first having obtained a permit, lease or letter of approval from the DNREC. Such permit, lease or letter of approval, if granted, may include reasonable conditions required in the judgment of the DNREC to protect the interest of the public. If it is determined that granting the permit, lease or approval will result in loss to the public of a substantial resource, the permittee may be required to take measures which will offset or mitigate the loss. [7 Del. C. §7205]
- 5.4.19 The extent of jurisdictional authority over public or private subaqueous lands includes any activity in a navigable stream or waterbody, which have a hydrologic connection to natural waterbodies. "Activity" includes, but is not limited to, any human induced action, such as dredging, draining, filling, grading, bulkheading, mining, drilling, extraction of materials or excavation, or construction of any kind, including, but not limited to, construction of a boat ramp or slip, breakwater, residences, bridge, bulkhead, culvert, dam, derrick, deck, groin, jetty, lagoon, gabion, rip-rap, launching facility, marina, mooring facility, pier, seawall, walkway, or wharf. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 1.02(A)(1) and Definition #1, amended September 2, 1992]
- 5.4.20 The following types of activities in, on, over, or under private subaqueous lands require a permit or letter of authorization from the DNREC:
 - 5.4.20.1 Construction of a convenience structure or boat docking facility.
 - 5.4.20.2 Construction of a shoreline erosion control structure or measure.
 - 5.4.20.3 Dredging, filling, excavating or extracting of materials.
 - 5.4.20.4 Excavation, creation, or alteration of any channel, lagoon, turning basin, pond, embayment, or other navigable waterway on private subaqueous lands which will make connection with public subaqueous lands.
 - 5.4.20.5 Dredging of existing channels, ditches, dockages, lagoons and other navigable waterways to maintain or restore the approved depth and width.
 - 5.4.20.6 Excavation of land which makes connection to public subaqueous lands.

- 5.4.20.7 The laying of any pipeline, electric transmission line, telephone line, or any other utility structure in, on, over, or under the beds of private subaqueous lands.
 - 5.4.20.8 Installation of temporary or permanent mooring buoys or private marker buoys.
 - 5.4.20.9 Establishment of an anchorage for the use of a mooring for more than two (2) boats or for appurtenant onshore services.
 - 5.4.20.10 Anchoring or mooring a floating platform over private subaqueous lands and for a period of twenty-four (24) consecutive hours or more.
 - 5.4.20.11 Anchoring or mooring any vessel or platform over private subaqueous lands for revenue generating purposes.
 - 5.4.20.12 Repair and replacement of existing serviceable structures over private subaqueous lands, except no permit or letter is required for repairs or structural replacements which are above the mean low tide and which do not increase any dimensions or change the use of the structure. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 1.03(C), amended September 2, 1992]
- 5.4.21 The following types of activities on public subaqueous lands require a lease, permit, or letter of authorization from the DNREC:
- 5.4.21.1 Construction or use of any structure on, in, under, or over public subaqueous lands, including but not limited to, any convenience structures, shoreline erosion control structure or measure, or boat docking facility.
 - 5.4.21.2 Dredging, filling, excavating or extracting of materials.
 - 5.4.21.3 Continuous anchoring or mooring of a commercial vessel used in a commercial activity on or over public subaqueous lands for thirty (30) or more calendar days during any consecutive three (3) months.
 - 5.4.21.4 The laying of any pipeline, electric transmission line, or telephone line in, on, over, or under the beds of public subaqueous lands.
 - 5.4.21.5 Installation of temporary or permanent mooring buoys or private marker buoys.
 - 5.4.21.6 Establishment of an anchorage for mooring more than two (2) boats or which serves as a permanent place for resident vessels.
 - 5.4.21.7 Anchoring or mooring a floating platform over public subaqueous lands and for a period of twenty-four (24) consecutive hours or more.
 - 5.4.21.8 Maintenance dredging of existing or new channels, ditches, dockages, lagoon and other waterways to maintain or restore the approach depth and width.
 - 5.4.21.9 Anchoring or mooring any vessel or platform over public subaqueous lands for revenue generating purposes.
 - 5.4.21.10 Repair and replacement of existing serviceable structures over private subaqueous lands, except no permit or letter is required for repairs or structural replacements which are above the mean low tide and which do not increase any dimensions or change the use of the structure.
 - 5.4.21.11 New dredging activities of channels, ditches, dockage, or other waterways. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 1.04(B), amended September 2, 1992]

- 5.4.22 The DNREC shall consider the public interest in any proposed activity which might affect the use of subaqueous lands. These considerations include, but are not limited to, the following:
- 5.4.22.1 The value to the State or the public in retaining any interest in subaqueous lands which the applicant seeks to acquire, including the potential economic value of the interest.
 - 5.4.22.2 The value to the State or the public in conveying any interest in subaqueous lands which the applicant seeks to acquire.
 - 5.4.22.3 The potential effect on the public with respect to commerce, navigation, recreation, aesthetic enjoyment, natural resources and other uses of the subaqueous lands.
 - 5.4.22.4 The extent to which any disruption of the public use of such lands is temporary or permanent.
 - 5.4.22.5 The extent to which the applicant's primary objectives and purposes can be realized without the use of such lands (avoidance).
 - 5.4.22.6 The extent to which the applicant's primary purpose and objectives can be realized by alternatives, i.e. minimize the scope or extent of an activity or project and its adverse impact.
 - 5.4.22.7 Given the inability for avoidance or alternatives, the extent to which the applicant can employ mitigation measures to offset any losses incurred by the public.
 - 5.4.22.8 The extent to which the public at large would benefit from the activity or project and the extent to which it would suffer detriment.
 - 5.4.22.9 The extent to which the primary purpose of a project is water-dependent. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.01(A), amended September 2, 1992]
- 5.4.23 The DNREC shall consider the impact on the environment, including but not limited to, the following:
- 5.4.23.1 Any impairment of water quality, either temporary or permanent, which may reasonably be expected to cause violation of the State Surface Water Quality Standards. This impairment may include violation of criteria or degradation of existing uses;
 - 5.4.23.2 Any effect on shellfishing, finfishing, or other recreational activities and existing or designated water uses;
 - 5.4.23.3 Any harm to aquatic or tidal vegetation, benthic organisms or other flora and fauna, and their habitats;
 - 5.4.23.4 Any loss of natural aquatic habitat;
 - 5.4.23.5 Any impairment of air quality either temporarily or permanently, including noise, odors, and hazardous chemicals; the extent to which the proposed project may adversely impact natural surface and groundwater hydrology and sediment transport functions. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.01(B), amended September 2, 1992]

- 5.4.24 The DNREC shall also consider the following to determine whether to approve the application:
- 5.4.24.1 The degree to which the project represents an encroachment on or otherwise interferes with public lands, waterways or surrounding private interests.
 - 5.4.24.2 The degree to which the project incorporates sound engineering principles and appropriate materials of construction.
 - 5.4.24.3 The degree to which the proposed project fits in with the surrounding structures, facilities, and uses of the subaqueous lands and uplands.
 - 5.4.24.4 Whether the proposed activity complies with the State of Delaware's Surface Water Quality Standards both during construction and during subsequent operation or maintenance.
 - 5.4.24.5 The degree to which the proposed project may adversely affect shellfish beds or finfish activity in the area. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.01(C), amended September 2, 1992]
- 5.4.25 The following concerns for protecting water quality shall be specifically considered by the DNREC in evaluating applications for dredging projects:
- 5.4.25.1 All dredging is to be conducted in a manner consistent with sound conservation and water pollution control practices. Spoil and fill areas are to be properly diked to contain the dredged material and prevent its entrance into any surface water. Specific requirements for spoils retention may be specified by the DNREC in the approval, permit or license.
 - 5.4.25.2 All material excavated shall be transported, deposited, confined, and graded to drain within the disposal areas approved by the DNREC. Any material that is deposited elsewhere than in approved areas shall be removed by the applicant and deposited where directed at the applicant's expense and any required mitigation shall also be at the applicant's expense.
 - 5.4.25.3 Materials excavated by hydraulic dredge shall be transported by pipeline directly to the approved disposal area. All pipelines shall be kept in good condition at all times and any leaks or breaks shall be immediately repaired.
 - 5.4.25.4 Materials excavated and not deposited directly into an approved disposal area shall be placed in scows or other vessels and transported to either an approved enclosed basin, dumped, and then rehandled by hydraulic dredge to an approved disposal area, or to a mooring where scows or other vessels shall be unloaded by pumping directly to an approved disposal area.
 - 5.4.25.5 When scows or other vessels are unloading without dumping, they shall have their contents pumped directly into an approved disposal area by a means sufficient to preclude any loss of material into the body of water.
 - 5.4.25.6 In approved disposal areas, the applicant may construct any temporary structures or use any means necessary to control the dredge effluent, except borrowing from the outer slopes of existing embankments and/or hydraulic placing of perimeter embankments. For bermed disposal sites, a minimum freeboard of two (2) feet, measured vertically from the retained materials and water to the top of the adjacent

- 5.4.25.7 The applicant shall not obstruct drainage or tidal flushing on existent wetlands or upland areas adjacent thereto. The applicant shall leave free, clear, and unobstructed outfalls of sewers, drainage ditches, and other similar structures affected by the disposal operations. The dredged materials shall be distributed within the disposal area in a reasonably uniform manner to permit full drainage without ponding during and after fill operations.
- 5.4.25.8 The dredging operation must be suspended if water quality conditions deteriorate in the vicinity of dredging or spoil disposal site. Minimum water quality standards may be included as an element of the permit and shall be monitored by the applicant. Violation of these conditions shall be cause for immediate suspension of activity and notification of the DNREC. Dredging shall not be resumed until water quality conditions have improved and the DNREC has authorized the resumption. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.05(C), amended September 2, 1992]
- 5.4.26 The following types of dredging projects are prohibited:
 - 5.4.26.1 Dredging of biologically productive areas, such as nursery areas, shellfish beds, and submerged aquatic vegetation, if such dredging will have a significant or lasting impact on the biological productivity of the area.
 - 5.4.26.2 Dredging of new dead-end lagoons, new basins and new channels, which have a length to width ratio greater than 3:1. This subsection shall not apply to marina projects governed by the Marina Regulations.
 - 5.4.26.3 Dredging channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterway.
 - 5.4.26.4 Dredging channels, cleaning marinas or other subaqueous areas by using propeller wash from boats. [Delaware Regulations Governing the Use of Subaqueous Lands, Section 3.05(D), amended September 2, 1992]

5.5 "PUBLIC LANDS" MANAGEMENT

- 5.5.1 State "public lands" shall be protected to preserve the scenic, historic, scientific, prehistoric and wildlife values of such areas. [7 *Del. C.* Chapters 45 and 47; Delaware Executive Order 42 and 43, August 15, 1996]
- 5.5.2 The integrity of State "public lands" shall be protected from encroachment. [7 *Del. C.* Chapters 45 and 47; Delaware Executive Order 42 and 43, August 15, 1996]
- 5.5.3 All private development on "public lands", except that authorized by DNREC for public use, shall be prohibited. [7 *Del. C.* Chapters 45 and 47; Delaware Executive Order 42 and 43, August 15, 1996]
- 5.5.4 The "public lands" shall be surveyed and remain appropriately marked with the location and coordinates tied to the state plane coordinate system and recorded with the office of the recorder of deeds for the county in which the lands lies. Detailed drawings, survey work sheets and field notes, perimeter descriptions, and other pertinent property records shall be likewise recorded. [7 *Del. C.* Chapters 45 and 47; Delaware Executive Order 42 and 43, August 15, 1996]

- 5.5.5 These lands shall be managed for public recreation purposes and for the conservation and preservation of their natural resources and beauty. A management priority shall be the maintenance of public access to the beach and ocean where such access can be accommodated without serious damage to the primary resources. The Department may lease certain portions for highway and utility purposes as it deems advisable and for the public good. Management of these lands shall be consistent with the State Comprehensive Outdoor Recreation Plan (SCORP) and in accordance with sound master planning activities. [7 *Del. C.* Chapters 45 and 47; Delaware Executive Order 42 and 43, August 15, 1996]

5.6 NATURAL AREAS MANAGEMENT

5.6.1 GENERAL

- 5.6.1.1 Natural preserves shall be established for the following uses and purposes:
- 5.6.1.1.1 For scientific research in such fields as ecology, taxonomy, genetics, forestry, pharmacology agriculture, soil science, geology, conservation, archaeology, and other subjects;
 - 5.6.1.1.2 Teaching of biology, natural history, ecology, geology, conservation, and other subjects;
 - 5.6.1.1.3 As habitats for plant and animal species and communities and other natural objects;
 - 5.6.1.1.4 As reservoirs of natural materials;
 - 5.6.1.1.5 As places of natural interest and beauty;
 - 5.6.1.1.6 As living illustrations of our natural heritage wherein one may observe and experience natural biotic and environmental systems of the earth and their processes;
 - 5.6.1.1.7 To promote understanding and appreciation of the scientific, educational, aesthetic, recreational and cultural values of such areas by the people of the State of Delaware; or
 - 5.6.1.1.8 For the preservation and protection of natural areas against modification or encroachment resulting from occupation, development, or other use which would destroy their natural or aesthetic conditions.
 - 5.6.1.1.9 Nature preserves may be acquired by gift, devise, purchase, exchange or any other method of acquiring real property or any estate, interest or right therein and/or voluntary agreements by property grantor. [7 *Del. C.* 7303, 7302(6) and 7306]
- 5.6.1.2 Suitable lands, in part or in their entirety, within the jurisdiction of any and all units, departments, agencies, and instrumentalities of the state, including counties, municipalities, schools, colleges and universities, should be dedicated as nature preserves for preservation purposes. [7 *Del. C.* §7311]
- 5.6.1.3 Natural areas acquired pursuant to these policies shall be established as nature preserves. Property shall not be acquired for the establishment of nature preserves unless the terms of acquisition restrict the use of the acquired area in a

manner which adequately provides for its preservation and protection against modification or encroachment. [7 *Del. C.* §7306(a)(c)]

- 5.6.1.4 The terms of acquisition of property acquired for nature preserves shall be enforced and shall not be taken for any use inconsistent with preservation except for another public use after:
 - 5.6.1.4.1 A public hearing;
 - 5.6.1.4.2 A finding by DNREC that an imperative and unavoidable public necessity for such other public use exists;
 - 5.6.1.4.3 Approval of the governor after consultation with the Delaware Natural Areas Advisory Council; and
 - 5.6.1.4.4 A legislative act, not less than six months from the date of the governor's approval authorizing such taking.
 - 5.6.1.4.5 This policy shall not apply, however, to natural areas dedicated as nature preserves if the terms of such dedication provide otherwise. [7 *Del. C.* §§7305(e)(4), 7307(4)(8), 7308, 7309, 7310]
- 5.6.1.5 Aid should be provided in the establishment, restoration, and preservation of natural areas within the state and elsewhere than in the nature preserve system [7 *Del. C.* §§7307(8)]

5.6.2 INLAND BAYS' WATERSHED MANAGEMENT

- 5.6.2.1 Water quality in the Inland Bays watersheds shall be protected and improved though:
 - 5.6.2.1.1 Reduction of point sources;
 - 5.6.2.1.2 Establishment of riparian buffers,
 - 5.6.2.1.3 Use of sediment and stormwater controls, and
 - 5.6.2.1.4 Proper design, installation, operation, maintenance and inspection of on-site waste water treatment and disposal systems.
 - 5.6.2.1.5 For the purpose of this section, the Indian River Watershed, Indian Bay Watershed, Rehoboth Bay Watershed, and Little Assawoman Bay Watershed shall be collectively known as the "Inland Bays Watersheds". [Delaware Regulations Governing The Pollution Control Strategy For The Indian River, Indian River Bay, Rehoboth Bay And Little Assawoman Bay Watersheds, effective November 11, 2008]

5.7 FLOOD HAZARD AREAS MANAGEMENT

5.7.1 GENERAL

- 5.7.1.1 Local floodplain management programs shall be monitored and annually reviewed to determine if they are being administered properly and are achieving flood damage reduction objectives. Federal floodplain standards shall also be periodically reviewed as they apply to Delaware to determine if they are adequate to mitigate damage in the State's floodplains and to determine whether long and

short-term adverse impacts associated with the activities within flood plains and support of flood plain development are being avoided to the extent possible,. In the event that any of the above determinations indicate the need for remedial action, the aforementioned agency shall take whatever measures it deems appropriate to correct the situation. [Delaware Executive Order 43, August 15, 1996; Executive Order 48, February 27, 1978]

- 5.7.1.2 All state agencies shall participate in and comply with the requirements of the Federal Flood Insurance Program. [Delaware Executive Order 48, February 27, 1978; Delaware Executive Order 43, August 15, 1996]
- 5.7.1.3 State agencies shall to the maximum extent possible minimize the threat posed by flood hazards for the following activities:
 - 5.7.1.3.1 The construction of state buildings, structures, roads or other facilities;
 - 5.7.1.3.2 The administration of grant or loan programs involving such construction by other governmental entities or private parties;
 - 5.7.1.3.3 The transfer of lands or other properties; and
 - 5.7.1.3.4 Programs which affect or influence land development. [Delaware Executive Order 29, September 6, 1977, Delaware Executive Order 48, February 27, 1978 and Delaware Executive Order 43, August 15, 1996]
- 5.7.1.4 All state agencies, in cooperation with the Delaware Department of Natural Resources and Environmental Control, shall conduct a survey of their holdings and identify those structures and sites which are flood prone. An inventory shall be maintained by such agencies and updated as of June 30 of each year, indicating: such structures, sites, and uses thereof; the replacement or current economic value of the structures, their contents, and sites; and records of flood-related damage incurred by the structures, contents or sites. [Delaware Executive Order 48, February 27, 1978; Delaware Executive Order 43, August 15, 1996]
- 5.7.1.5 Actions which may affect state or local flood hazard areas management shall be monitored and by whatever action is deemed appropriate, encourage or require such actions which are inconsistent with such management to be modified in a manner that will make them consistent. [Delaware Executive Order 43, August 15, 1996]

5.7.2 ADVISORY POLICIES

- 5.7.2.1 Local units of government in the state shall be encouraged to participate in the Federal Flood Insurance Program. [Delaware Executive Order 43, August 15, 1996]

5.8 PORT OF WILMINGTON

5.8.1 ADVISORY POLICIES

- 5.8.1.1 The long-term economic viability and competitiveness of the Port of Wilmington should be encouraged and supported.

- 5.8.1.2 The people who benefit from the Port of Wilmington should contribute to its support and help maintain the financial health of the port.
- 5.8.1.3 Expansion of the Port of Wilmington along the Delaware River is encouraged to meet future national and regional transshipment needs and to reduce the dredging and spoils disposal activities associated with port operations along the Christina River. Port expansion, however, should not proceed if such expansion means air and water quality standards cannot be kept.
- 5.8.1.4 The port should be promoted for general cargo transfer and, to the extent feasible, as a location for the support of outer continental shelf development.

5.9 WOODLANDS AND AGRICULTURAL LANDS MANAGEMENT

5.9.1 WOODLANDS

- 5.9.1.1 Unwarranted destruction or damage to woodlands shall be prevented. Public and private interests must recognize that woodlands have economic, recreational, wildlife, water supply and scenic values. State actions shall avoid the unnecessary damage or destruction of woodlands. [3 *Del. C.* Ch 9 Subch V, Ch 10 Subch IV; Delaware Executive Order 42 and 43, August 15, 1996]
- 5.9.1.2 The pine and yellow-poplar forest resources of the State shall be preserved and protected from depletion as a result of harvesting activities. [3 *Del. C.* §1051]
- 5.9.1.3 No person shall commence a cutting operation unless seed trees have been reserved pursuant to the natural regeneration method or pursuant to an alternate management plan approved by the State Forester or his designee. This policy shall not apply to cutting operations of timber from land being cleared for reservoirs, military installations, agriculture, residential, ditch and utility right-of-ways, industrial sites, railroads or to cutting operations undertaken pursuant to a contract executed prior to January 1, 1989.[3 *Del. C.* §1053 (a)(b)]
- 5.9.1.4 No person shall cut or permit to be cut any pine or yellow-poplar tree or seedling required to be reserved for reseeding or planted under a reforestation plan or perform any act or permit any act to be performed which prevents reseeding or reforestation of any area in which a cutting operation has been conducted. [3 *Del. C.* §1056]

5.9.2 SILVICULTURE

- 5.9.2.1 Waters of the State shall be protected from sediment pollution resulting from silviculture activities. [3 *Del. C.* §1071, 1073]
- 5.9.2.2 Special orders can be issued if the Forestry Administrator, or Forestry Administrator's designee, finds that any owner or operator is conducting any silvicultural activity in a manner which is causing or is likely to cause alteration of physical, chemical or biological properties of any state water, resulting from sediment deposition presenting an imminent and substantial danger to:

- 5.9.2.2.1 The public health, safety, or welfare, or the health of animals, fish or aquatic life;
- 5.9.2.2.2 A public water supply; or
- 5.9.2.2.3 Recreational, commercial, industrial, agricultural or other reasonable uses. [3 *Del. C.* §1073]
- 5.9.2.3 All open water bodies, perennial streams, intermittent streams with a well-defined channel, and streams that have been hydrologically modified by dredging or straightening shall have a Streamside Management Zone (SMZ), unless the property or a portion of the property is covered by an approved Delaware Seed Tree Law application and is located on slopes of less than three (3) percent. The minimum width for a SMZ is 50 feet from each side of qualifying streams. Within a SMZ, at least sixty (60) square feet of basal area per acre of trees well distributed throughout the area shall be retained, or at least sixty (60) percent of the overstory. [Delaware's Forestry Erosion and Sediment Regulations, section 5.9, effective July 1, 1996]

5.9.3 AGRICULTURAL LANDS

- 5.9.3.1 Agricultural practices shall be conducted in a manner which reduces pesticides and sediment loads to estuaries, bays, and other waterbodies. [3 *Del. C.* §1203(b); Delaware Forestry Erosion and Sediment Regulations, effective July 1, 1996]
- 5.9.3.2 All public and private entities whose actions may substantially affect agricultural lands in Delaware, or the agricultural productivity of such lands, shall consider the need to preserve and protect such lands prior to taking such actions, and should preserve and protect agricultural lands whenever practicable. State agencies shall protect and preserve agricultural lands to the maximum extent practical. [3 *Del. C.* Ch 9; Delaware Executive Order 42, August 15, 1996]
- 5.9.3.3 "Scattered" development should be limited through the consideration of alternative locations in growth zones, the availability of public services such as sewer and water systems, police and fire facilities, and costs for resulting infrastructure needs when planning for future growth and development. [9 *Del. C.* Ch 26 Subch II, Ch 49 Subch II, Ch 69 Subch II; Delaware Executive Order No. 43, August 15, 1996]

5.9.4 TAX DITCHES

- 5.9.4.1 Tax ditch planning will be done on a watershed basis. A watershed area comprises all the land and water within the confines of a drainage divide and must follow hydrologic boundaries for engineering purposes. A watershed area may comprise the land and water of two or more minor drainageways that are separate tributaries to a stream, artificial waterway, lake, or tidal area. The watershed area considered for design must include all direct tributary drainageways and lands that contribute to flows in the planned channels. [Principle and Guidelines for Planning, Constructing, and Maintaining Drainage Ditches in the State of Delaware, section A, June 1995]

- 5.9.4.2 Channels proposed for cleanout should be limited to those which have reduced hydraulic capacity due to sediment, woody vegetation, and debris. Channels which do meet functional standards may be included in the tax ditch plan for future maintenance. Land use changes may have eliminated the need for reconstructing some channel segments. [Principle and Guidelines for Planning, Constructing, and Maintaining Drainage Ditches in the State of Delaware, section B, June 1995]
- 5.9.4.3 Environmental studies associated with tax ditch projects will concentrate primarily on impacts to wetlands, forestry and disruption of fish and wildlife resources. Most channel cleanout projects are small in scope and have limited impacts. Avoidance and minimization will be the primary methods of limiting negative impacts on fish and wildlife resources. Practices such as channel relocation, one sided construction, selective spoil placement and minimal clearing can be used both to protect existing sensitive areas and restore previously disturbed sensitive areas. Wildlife and water quality enhancement practices, such as plugging channels which drain wooded wetlands and creating berms along channels to prohibit wetland water from draining into the channel, will be included as part of the tax ditch plan when site conditions allow in order to mitigate temporary wildlife losses and to restore previously lost functions to these water dependent resources. [Principle and Guidelines for Planning, Constructing, and Maintaining Drainage Ditches in the State of Delaware, section C, June 1995]

5.9.5 ADVISORY POLICY

- 5.9.5.1 The use of farmlands for non-agricultural purposes should be discouraged by the Farmers Home Administration and all other public financing programs. Instead, development should be directed to the numerous smaller communities which have adequate in-place public services and facilities, as well as adequate land area to accommodate new development.

5.10 HISTORIC AND CULTURAL AREAS MANAGEMENT

5.10.1 GENERAL

- 5.10.1.1 In order to protect and preserve archaeological and scientific information, matters and objects which are to be found on privately owned lands in this State, excavations on privately owned lands should be discouraged, except with when said activities are conducted in cooperation with the Division of Historical and Cultural Affairs. [7 Del. C. §5315]
- 5.10.1.2 No person shall excavate, collect, deface, injure or destroy any archaeological resource or artifact, or otherwise disturb or alter an archaeological resource or artifact or its surrounding location in context, in or on lands owned or controlled by this State, except with the permission of the Governor of this State or the person duly authorized by the Governor to extend and grant such permission. Archaeological resources and artifacts shall be defined to include any remains of past human life or activity that are at least 50 years old. [7 Del. C. §5308]

- 5.10.1.3 Permits for archaeological survey and excavation of archaeological resources or artifacts on lands owned or controlled by this State may be granted to any properly qualified person to conduct such investigations for the furthering of archaeological knowledge for public interest. Archeological resources which are excavated or removed from state lands, including subaqueous lands, will remain the property of the State of Delaware and will be preserved by a qualified university, museum, or other scientific or educational institution. The permit may contain any terms, conditions, or limitations deemed necessary to protect the integrity of the archeological resource and may be suspended if its provisions have been violated [7 *Del. C.* §5309]
- 5.10.1.4 All activities that may impact historic and cultural areas shall be coordinated, to the maximum extent possible, with the Delaware Division of Historical and Cultural Affairs. [7 *Del. C.* §5301; Delaware Executive Order 42, August 15, 1996]
- 5.10.1.5 When unmarked burials or human skeletal remains are known or suspected in a construction area or being encountered as a result of construction or agricultural activities, said activity shall cease immediately upon discovery and the Medical Examiner or the Director of the Division of Historical and Cultural Affairs notified of the discovery. [7 *Del. C.* §5403(b)]

5.10.2 ADVISORY POLICY

- 5.10.2.1 All public and private entities whose actions may interfere with the enjoyment or other use of historic and cultural areas in Delaware should consider the need to preserve and protect these areas prior to taking such actions, and should preserve and protect such areas whenever practicable.

5.11 LIVING RESOURCES

5.11.1 GENERAL

- 5.11.1.1 No activity shall have an adverse environmental effect on living resources and shall include consideration of the effect of site preparation and the proposed activity on the following wetland values:
 - 5.11.1.1.1 Value of tidal ebb and flow
 - 5.11.1.1.1.1 Production Value: carving organic matter to adjacent estuaries and coastal waters which serve as breeding areas for certain animal species (especially fish and shellfish).
 - 5.11.1.1.1.2 Value as a natural protective system of absorption of storm wave energy, flood waters, and heavy rainfall, thereby decreasing flood and erosion damage.
 - 5.11.1.1.1.3 The prevention of silting in certain harbors and inlets thereby reducing dredging.
 - 5.11.1.1.1.4 Removal and recycling of inorganic nutrients.
 - 5.11.1.1.1.5 Effect on the estuarine waters.

5.11.1.1.2 Habitat Value

- 5.11.1.1.2.1 Habitat for resident species of wildlife including furbearers, invertebrates, finfish.
- 5.11.1.1.2.2 Habitat for migratory wildlife species including waterfowl, wading birds, shorebirds, passerines, finfish, shrimp.
- 5.11.1.1.2.3 Rearing area, nesting area, breeding grounds for various species.
- 5.11.1.1.2.4 Habitat for rare or endangered plants.
- 5.11.1.1.2.5 Presence of plants or animals known to be rare generally, or unique to the particular location.
- 5.11.1.1.2.6 Presence of plants or animals near the limits of their territorial range.
- 5.11.1.1.2.7 Presence of unique geologic or wetland features [7 Del. Admin. Code 7502 §12.2]

5.11.2 FISH AND WILDLIFE

- 5.11.2.1 All forms of protected wildlife shall be managed and protected from negative impacts. [7 *Del. C.* §102(a)]
- 5.11.2.2 State shellfish resources shall be protected from further impairment and improved when possible [7 *Del. C.* §1902 (a)(1)(2)(5)]
- 5.11.2.3 Mosquito and other pest controls shall use techniques such as open marsh water management, which reduce the application of chemicals and which substitute biological controls.[Delaware Mosquito Control Spray Policy, revised January 10, 2008, Delaware Executive Order 43, August 15, 1996]

5.11.3 NONGAME AND ENDANGERED SPECIES

- 5.11.3.1 “Nongame” is that fauna, including rare and endangered species, which are not commonly trapped, killed, captured or consumed, either for sport or profit. [7 *Del. C.* §202(a)]
- 5.11.3.2 Rare and endangered species are in need of active, protective management to preserve and enhance such species. The diversity and abundance of the native flora and fauna of Delaware, particularly those deemed rare or endangered, shall be preserved and enhanced through the protection of the habitat, natural areas, and areas of unusual scientific significance or having unusual importance to their survival. [7 *Del. C.* §201(1)(2)]

5.11.4 ADVISORY POLICY

- 5.11.4.1 Actions which may interfere with or otherwise adversely affect fish and wildlife in Delaware shall be implemented only after careful consultation with DNREC and exploration of alternatives less damaging to such fish and wildlife.

5.12 MINERAL RESOURCE MANAGEMENT

- 5.12.1 Leases for the extraction and production of minerals determined to be in the public's interest must not create any air, water or other pollution, endanger marine life or wildlife, and must protect state lands from drainage of oil, gas, or other minerals or objectionable substances . [7 *Del. C.*§6108]

5.13 STATE OWNED COASTAL RECREATION AND CONSERVATION

- 5.13.1 State owned lands whose natural condition or present state of use would maintain important recreational areas and wildlife habitat, or would maintain or enhance the conservation of natural, cultural or historic resources shall be managed, preserved, and protected, for conservation and recreational use. [7 *Del. C.* §§7301, 7504(6), 5305; 7 *Del. C.* Ch 45]
- 5.13.2 Open spaces shall be preserved through the acquisition of interests or rights in real property, or donation of lands, for public recreation and conservation of natural resources promotes biological diversity, public health, prosperity and general. [7 *Del. C.* §7502]

5.14 PUBLIC TRUST DOCTRINE

- 5.14.1 The public have a right of navigation and fishery on all streams where the tide ebbs and flows, even though the riparian proprietor's lines cover the place; but they have no right to land fish on private property, above the high water marks. [Bickel v. Polk, Delaware Supr. 5 Harr. 325 (1851)]
- 5.14.2 Unless otherwise proven, the Public Trust Doctrine is applicable to those properties between the high and low water marks. [Bickel v. Polk, Delaware Supr. 5 Harr. 325 (1851); State of Delaware Regulations Governing the Use of Subaqueous Lands, Section 1.02(B), amended September 2, 1992]

5.15 ENERGY FACILITIES

5.15.1 GENERAL

- 5.15.1.1 Heavy industry uses of any kind offshore gas and liquid or solid bulk product transfer facilities which were not in operation on June 28, 1971, are prohibited in the coastal strip (see CMP Policy 5.4.1) and no permits may be issued therefore. [7 *Del. C.* §7003]
- 5.15.1.2 The construction of new petroleum refineries in the coastal strip is prohibited. New petroleum facilities inland will be considered provided the negative impacts are minimized to the maximum possible extent. [7 *Del. C.* §§7001 and 7003]
- 5.15.1.3 Deepwater ports on the Delaware side of the Delaware River and Bay are prohibited by the Coastal Management Program. Such ports are also prohibited within Delaware's three mile jurisdiction along the Atlantic Ocean. [7 *Del. C.* §§7001 and 7003]

- 5.15.1.4 The DCMP supports the concept of a port offshore the Atlantic Coast, provided such activities do not result in the degradation of Delaware's natural resources including locating far enough offshore to minimize oil spill threats to the coast and to obviate dredging requirements; stringent construction and operation safeguards; a demonstrated reduction of tanker traffic and lightering in the bay; and assurances that state financial interests are protected in the case that an oil spill should occur. [7 *Del. C.* Ch 62; 7 *Del. C.* §7004; 29 *Del. C.* §8003]
- 5.15.1.5 The Coastal Management Program permits offshore oil and gas exploration and development in Delaware waters, on a case-by-case basis, provided such activities do not result in the degradation of Delaware's natural resources. [7 *Del. C.* Ch 60, 61, 70]
- 5.15.1.6 Offshore and onshore pipelines are permitted by the CMP, provided the activity is conducted in a manner does not result in the degradation of the Delaware's natural resources and that state-designated wetlands are avoided wherever practical. However, the terminus of offshore pipelines from both OCS operations and deepwater ports shall not be located within the coastal strip. [7 *Del. C.* §§7001, 7002(f), 7003]
- 5.15.1.7 New storage tanks connected to OCS facilities are permitted outside the coastal strip, on a case-by-case basis provided the activity is conducted in a manner that shall protect Delaware's public health and environmental quality. [7 *Del. C.* §§7002(e), 7003]
- 5.15.1.8 The environmental impact of gas plants is such that the CMP prohibits them in wetlands and the coastal strip. Inland locations are acceptable on a case-by-case basis provided activity is conducted in a manner that shall protect Delaware's public health and environmental quality. [7 *Del. C.* §§7001, 7002(e), 7003]
- 5.15.1.9 The CMP permits facilities used in generating, transmitting, distributing, transforming, switching, and otherwise transporting and converting electrical energy and facilities used to generate electric power directly from solar energy provided the activity is conducted in a manner that minimizes negative impacts to the fullest extent possible. [7 *Del. C.* §§7002(e), 7004; *Kreshtool v. Delmarva Power & Light Co.*, Delaware Super., 310 A. 2d 649(1973)]
- 5.15.1.10 3. The Coastal Management Program also permits nuclear power generation facilities but recommends alternative fuels when feasible because of safety concerns and the unresolved problems of nuclear waste transfer, storage and disposal. [16 *Del. C.* §§7414, 7417; A.G. Opinion dated April 3, 1974]

5.15.2 ADVISORY POLICIES

- 5.15.2.1 The CMP supports OCS development of alternate energy facilities due to the compelling national interest provided such activities do not result in the degradation of Delaware's natural resources.

5.16 PUBLIC INVESTMENT

5.16.1 GENERAL

- 5.16.1.1 When appropriate, the Delaware Water Pollution Control Revolving Fund (SRF), as authorized by Title VI of the Federal Clean Water Act, should be used for projects which are consistent with DCMP policies.[29 *Del. C.* §8003 (12)]
- 5.16.1.2 Large scale resource recovery projects, public education and promotion of statewide recycling and waste reduction, particularly by State agencies, marketing for use of recovered materials, should be utilized to increase recycling and the separation of materials harmful to the environment for authorized disposal. [7 *Del. C.* §6452]

5.16.2 ADVISORY POLICIES

- 5.16.2.1 Highest priority should be given to maintenance and safety improvements to the existing highway system, and in particular the correction of seriously deteriorated and substandard conditions.
- 5.16.2.2 Private development should bear the costs of highway improvements where existing and programmed roads will not be able to carry the additional traffic generated by the proposed development. In this regard, large traffic generators (shopping centers, industries, institutions, residential complexes) should be discouraged in areas where serious traffic or safety problems prevail.
- 5.16.2.3 The construction of public housing (under the state housing development fund) is encouraged:
 - 5.16.2.3.1 When it is located in existing settled areas;
 - 5.16.2.3.2 Where it can be serviced by existing facilities; and
 - 5.16.2.3.3 Where it will provide ready access to stores, transportation, health care, and other services.
 - 5.16.2.3.4 Projects which do not meet these criteria should not be supported by state money.

5.17 RECREATION AND TOURISM

5.17.1 ADVISORY POLICIES

- 5.17.1.1 Government promotion of recreation and tourism, particularly in coastal areas, should be based on a study of their costs and benefits to Delaware residents. Recreation and tourist development that results in unnecessary or excessive expenditure of tax dollars for the benefit of a few individuals or groups should be discouraged.
- 5.17.1.2 Year-round recreational and tourism programs and facilities are encouraged in order to reduce the reliance on summer-time recreation.

- 5.17.1.3 Recreation and tourism planning and development programs, such as the State Comprehensive Outdoor Recreation Planning Program (SCORP), are to be encouraged.

5.18 NATIONAL DEFENSE AND AEROSPACE FACILITIES

5.18.1 ADVISORY POLICY

- 5.18.1.1 The DCMP recognizes the importance in coastal states in the siting of national defense and aerospace facilities.

5.19 TRANSPORTATION FACILITIES

5.19.1 GENERAL

- 5.19.1.1 The DCMP supports the expansion and development of the Port of Wilmington. [7 *Del. C. Ch 70*]
- 5.19.1.2 Due to the threats posed to the natural environment, recreational activities and commercial fishing activities by the transfer of oil, petroleum products and their by-products between vessels and vessels and onshore facilities and vessels, parties responsible for oil spills, discharges and the escape of oil in the waters of the State shall be required to immediately remove such oil pollution to DNREC's satisfaction or the responsible parties shall be required to pay for the expenses incurred in the removal of such oil pollution. [7 *Del. C. §6201*]

5.19.2 ADVISORY POLICIES

- 5.19.2.1 When essential to the national interest, the construction, maintenance and improvement of transportation systems shall predominate over less essential interests.
- 5.19.2.2 Transportation planning programs shall provide for alternatives to continued reliance on private motor vehicles with their associated highway requirements.
- 5.19.2.3 The State shall undertake an accelerated program of highway maintenance, upgrading, and safety improvements.
- 5.19.2.4 The DCMP supports the maintenance of an adequate and efficient railroad network to serve industry and agriculture on the Delmarva Peninsula.
- 5.19.2.5 The DCMP supports the establishment and maintenance of efficient public transit systems in order to reduce impacts to air quality and natural resources of the State.
- 5.19.2.6 New or expanded ports which involve extensive and continual dredging and spoil disposal in order to keep them useable are discouraged unless it can clearly be demonstrated that such facilities can be developed in an environmentally sound manner and without imposing continuing maintenance costs on any level of government or the general public.

5.20 AIR QUALITY MANAGEMENT

- 5.20.1 In view of the rapid growth of population, agriculture, industry and other economic activities, the air resources of the State must be protected, conserved and controlled to assure their reasonable and beneficial use in the interest of the people of the State. [7 *Del. C. Ch 60*]
- 5.20.2 In order to protect Delaware's Air quality, the following sources of air pollution will be controlled:
 - 5.20.2.1 Sources which will emit to the atmosphere equal to or greater than 0.2 pound of air contaminant(s), in the aggregate, in any one day [7 *Del. Admin. Code §§1102, 1125, 1130*];
 - 5.20.2.2 Sources which will emit to the atmosphere particulate matter from fuel burning or industrial process equipment, construction and materials handling, or grain handling operations[7 *Del. Admin. Code §§1104, 1105, 1106, 1118*];
 - 5.20.2.3 Sources which will incinerate either noninfectious or infectious waste [7 *DE Admin. Code §§ 1107, 1129*];
 - 5.20.2.4 Sources which will emit to the atmosphere sulfur dioxide/compound emissions from fuel burning equipment or industrial operations 7 *DE Admin. Code §§1108, 1109, 1110*];
 - 5.20.2.5 Sources which will emit to the atmosphere carbon monoxide emissions from industrial process operations [7 *DE Admin. Code §1111*];
 - 5.20.2.6 Sources which will emit to the atmosphere nitrogen oxides [7 *DE Admin. Code §1112*];
 - 5.20.2.7 Sources which will conduct open burning; [7 *DE Admin. Code §1113*];
 - 5.20.2.8 Sources which will emit to the atmosphere visible emissions (opacity) [7 *DE Admin. Code §1114*];
 - 5.20.2.9 Sources which will emit to the atmosphere odorous air contaminants [7 *DE Admin. Code §1119*]
 - 5.20.2.10 Certain new, modified, and reconstructed sources [7 *DE Admin. Code §§1120, 1121, 1138*];
 - 5.20.2.11 Sources which will burn waste oil. No Person shall burn waste oil in fuel burning equipment or in an incinerator without first obtaining a permit. [7 *DE Admin. Code §1122*];
 - 5.20.2.12 Sources which will emit to the atmosphere volatile organic compounds [7 *DE Admin. Code §1124*]
- 5.20.3 Where it is established that the Delaware air regulations are inadequate to attain or maintain any applicable air quality standard, additional control measures shall be imposed to assure air quality is maintained. [7 *Del. Admin. Code §§1101, 1103*]

5.21 WATER SUPPLY MANAGEMENT

5.21.1 GENERAL

- 5.21.1.1 The allocation and use of waters in the State shall be approved on the basis of equitable apportionment and in such a manner as to provide an adequate quantity and quality of water for the current and future needs of the people of Delaware. [Delaware Regulations Governing the Allocation of Water, Section 1.01, effective March 1, 1987; 7 *Del. C.* §6010(F)]
- 5.21.1.2 Withdraws from ground waters shall be limited to those rates which will not cause:
 - 5.21.1.2.1 Long-term progressive lowering of water levels, except in compliance with management water levels established by the DNREC;
 - 5.21.1.2.2 Significant interference with the withdrawals of other permit holders unless compensation for such injury is provided satisfactory to the DNREC;
 - 5.21.1.2.3 Violation of water quality criteria for existing or potential water supplies;
 - 5.21.1.2.4 Significant permanent damage to aquifer storage and recharge capacity; or
 - 5.21.1.2.5 Substantial impact on the flow of perennial streams below those rates specified for surface waters in the preceding section. [Delaware Regulations Governing the Allocation of Water, Section 3.04, effective March 1, 1987]
- 5.21.1.3 Withdraws from surface waters shall be limited to those rates which:
 - 5.21.1.3.1 Do not interfere with other permitted withdrawals unless compensation for such injury is provided satisfactory to the DNREC;
 - 5.21.1.3.2 Allow dilution and flushing of waste discharge and maintain adopted water quality standards;
 - 5.21.1.3.3 Protect valuable fish and wildlife;
 - 5.21.1.3.4 Maintain adequate flow over spillways of downstream impoundments;
 - 5.21.1.3.5 Prevent intrusion of saline waters where such intrusion threatens ground or surface water supplies; and
 - 5.21.1.3.6 Provide other ecological, recreational, aesthetic, and private benefits which are dependent upon surface water flows. [Delaware Regulations Governing the Allocation of Water, Section 3.03, effective March 1, 1987]

5.21.2 CONSTRUCTION AND USE OF WELLS

- 5.21.2.1 A well, defined as "any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of such excavation is for the location, testing, acquisition, use, for extracting water from, or the artificial recharge of subsurface fluids, and where the depth is greater than the diameter or width; not to include geotechnical test; soil, telephone, and construction piling borings; fence posts, test pits, or horizontal closed loop heatpump circulation systems constructed within twenty (20) feet of the ground surface"; including any

well installed for the purpose of obtaining geologic or hydrologic information shall receive the prior approval of the DNREC in the form of a well permit. [Delaware Regulations Governing the Construction and Use of Water Wells, Sections 1.02 (D) and 2.61, revised April 1, 1997]

- 5.21.2.2 The geology, hydrology and hydraulics of the area of interest, population density and water use, character of surface and subsurface, water quality, depletion rate of the water resources, sources of contamination, and other facts as may be relevant to the protection of the water resources and water supply shall be taken into account when considering applications and granting permits. [Delaware Regulations Governing the Construction and Use of Water Wells, Section 3.10(B), revised April 1, 1997]
- 5.21.2.3 The DNREC may place special conditions on the well permit such as, but not limited to, a requirement for double casing, special grouting requirements, special use restrictions, depth restrictions, notification of installation date, and special material requirements to protect the water resources, water supply, and the public health, safety and welfare [Delaware Regulations Governing the Construction and Use of Water Wells, Section 3.10 (C), revised April 1, 1997]
- 5.21.2.4 Where an approved public water supply system is legally and reasonably available to the area to be served, the DNREC shall deny an application for a well permit for a potable water well. [Delaware Regulations Governing the Construction and Use of Water Wells, Section 3.10 (D), revised April 1, 1997]
- 5.21.2.5 When proposed wells, with the exception of monitor, observation and recovery wells, are to be located within the jurisdiction or service area of a municipality serving public water the applicant shall submit a written statement of approval from said municipality with the well permit application [Delaware Regulations Governing the Construction and Use of Water Wells, Section 3.10 (E), revised April 1, 1997]
- 5.21.2.6 The DNREC may require as a permit condition that certain tests be done such as, but not limited to, the performance of a geophysical log on the well, the determination of water quality parameters, and the taking of formation samples [Delaware Regulations Governing the Construction and Use of Water Wells, Section 3.10 (F), revised April 1, 1997]

5.21.3 UNDERGROUND INJECTION CONTROL

- 5.21.3.1 Any underground injection, except as authorized by permit issued under the Underground Injection Control (UIC) program or otherwise authorized herein, is prohibited. The construction of any well required to have a permit is prohibited until the permit is issued. [Delaware Regulations Governing Underground Injection Control, Section 122.23(a), effective August 15, 1983]
- 5.21.3.2 The construction, use, operation or modification of any Class II, III, or IV well as defined in the Regulations Governing Underground Injection Control is hereby expressly prohibited and no permit may be issued for any such activity. [Delaware

Regulations Governing Underground Injection Control, Section 122.23(b), effective August 15, 1983]

- 5.21.3.3 No owner or operator shall construct, operate, maintain, convert, plug, abandon, or conduct and other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 142 or may otherwise adversely affect the health of persons. The applicant for a permit shall have the burden of showing that the requirements of this paragraph are met [Delaware Regulations Governing Underground Injection Control, Section 122.24(a), effective August 15, 1983]

5.21.4 ADVISORY POLICIES

- 5.21.4.1 State, County and local governments and private water suppliers are encouraged to develop a comprehensive water supply management program including the reallocation of water resources, the protection of aquifer recharge areas, and, where necessary, the abrogation of allocations to marginal users provided compensation is provided.

5.22 WASTE DISPOSAL MANAGEMENT

5.22.1 ON-SITE WASTEWATER TREATMENT AND DISPOSAL SYSTEM MANAGEMENT

- 5.22.1.1 On-site sewage disposal system design and installation shall be dependent upon site and soil conditions and shall use the best available technology. [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, revised January 31, 1995 amended April 11, 2005]
- 5.22.1.2 Each and every owner of real property is jointly and severally responsible for:
- 5.22.1.2.1 The proper disposal of wastewater on that property;
 - 5.22.1.2.2 Connecting all plumbing fixtures on that property, from which wastewater is or may be discharged, to a central wastewater system or on-site wastewater disposal system approved by the DNREC; and
 - 5.22.1.2.3 Maintaining, repairing, and/or replacing the system as necessary to assure proper operation of the system.[Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.01000, amended April 11, 2005]
- 5.22.1.3 No person shall construct, install, modify, rehabilitate, or replace an on-site system or construct or place any dwelling, building, mobile home, modular home or other structure capable of discharging wastewater on-site unless such person has a valid permit issued by the DNREC [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.02000, amended April 11, 2005]

- 5.22.1.4 No permit may be issued by the DNREC under the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems unless the county or municipality having land use jurisdiction has first approved the activity through zoning procedures provided by law. [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.03000, amended April 11, 2005]
- 5.22.1.5 At the sole discretion of the DNREC, if the proposed operation of a system would cause pollution of public waters or create a public health hazard, system installation or use shall not be authorized. [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.08000, amended April 11, 2005]
- 5.22.1.6 All wastewater shall be treated and disposed of in a manner approved by the DNREC. [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.09000, amended April 11, 2005]
- 5.22.1.7 No person shall dispose of wastewater at any location not authorized by the DNREC under applicable laws and regulations for such disposal. [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.10000, amended April 11, 2005]
- 5.22.1.8 Discharge of untreated or partially treated wastewater or septic tank effluent directly or indirectly onto the ground surface or into surface waters of the State, unless authorized by a permit issued by the DNREC, constitutes a public health hazard and is prohibited. [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.11000, amended April 11, 2005]
- 5.22.1.9 No cooling water, air conditioning water, ground water, oil, water softener brine or roof drainage shall be discharged into any wastewater system. [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.12000, revised January 31, 1995 amended April 11, 2005]
- 5.22.1.10 Each system shall have adequate capacity to properly treat and dispose of the maximum projected daily wastewater flow. The quantity of wastewater shall be determined from the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems or other information the DNREC determines to be valid that may show different flows [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.14000, amended April 11, 2005]
- 5.22.1.11 A permit to install a new wastewater system can be issued only if each site has received an approved site evaluation and is free of encumbrances (e.g., easements, deed restrictions, etc.), which could prevent the proper installation or operation of

the system [Delaware Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems, Section 3.15000, amended April 11, 2005]

5.22.2 LAND TREATMENT OF WASTES

- 5.22.2.1 A valid permit shall be obtained for construction and operation of waste collection, treatment, and disposal systems and facilities used for the purposes of land treatment of wastes. Land treatment system planning, design and operation must be conducted in a manner that shall protect Delaware's public health and environmental quality. [Delaware Guidance and Regulations Governing the Land Treatment of Wastes, Part I, Section 500, amended October 15, 1999]
- 5.22.2.2 Conditions necessary for the protection of the environment and the public health may differ from facility to facility because of varying environmental conditions and wastewater compositions. The DNREC may establish, on a case-by-case basis, specific permit conditions. Specific conditions shall be established in consideration of characteristics specific to a facility and inherent hazards of those characteristics. Such characteristics include, but are not limited to:
 - 5.22.2.2.1 Chemical, biological, physical, and volumetric characteristics of the wastewater;
 - 5.22.2.2.2 Geological and climatic nature of the facility site;
 - 5.22.2.2.3 Size of the site and its proximity to population centers and to the ground and surface water;
 - 5.22.2.2.4 Legal considerations relative to land use and water rights;
 - 5.22.2.2.5 Techniques used in wastewater distribution and the disposition of that vegetation exposed to wastewater;
 - 5.22.2.2.6 Abilities of the soils and vegetative cover to treat the wastewater without undue hazard to the environment or to the public health; and
 - 5.22.2.2.7 The need for monitoring and record keeping to determine if the facility is being operated in conformance with its design and if its design is adequate to protect the environment and the public health. [Delaware Guidance and Regulations Governing the Land Treatment of Wastes, Part II(B), Section 203(3)(a), amended October 15, 1999]
- 5.22.2.3 Specific objectives in using land treatment technology are:
 - 5.22.2.3.1 To apply wastes to the plant-soil system at such rates or over such limited time span that no land is irreversibly removed from some other potential societal usage (agriculture, development, forestation, etc.).
 - 5.22.2.3.2 To properly utilize the intimate mixing or dispersion of wastes into the upper zone of the plant-soil system with the objective of microbial stabilization, immobilization, selective dispersion, or crop recovery leading to an environmentally acceptable assimilation of the waste.
 - 5.22.2.3.3 To protect the environment and public health, safety, and welfare by providing for the proper design, operation, and management of land

treatment systems; and the proper treatment, transport, handling, and beneficial use of wastes.

5.22.2.3.4 To apply proper use of plant-soil and waste management practices and technology that will function without degrading the use of the State's groundwater resources as drinking water

5.22.2.3.5 To dispose of non-hazardous sludges in an efficient manner while reducing its impact on State resources. [Delaware Guidance and Regulations Governing the Land Treatment of Wastes, Part I, Section 300, amended October 15, 1999]

5.22.3 DISPOSAL OF SOLID WASTES

5.22.3.1 Disposal of solid wastes into the ocean waters of the State, the Delaware Bay, the inland bays and waters of exceptional recreational or ecological significance is prohibited. [7 *Del. C.* §6073]

5.22.3.2 It is the intent of the DNREC to require that solid waste handling and disposal be conducted in a manner and under conditions which will eliminate the dangerous and deleterious effects of improper solid waste handling and disposal upon the environment and upon human health, safety, and welfare. [Delaware Regulations Governing Solid Waste, Section 1, amended August 21, 2004]

5.22.3.3 Sanitary and industrial landfill facilities, including those that dispose dry waste, shall be located only in areas where the potential for degradation of the quality of air, land and water is minimal. [Delaware Regulations Governing Solid Waste, Sections 5.1.1 and 6.1.1, amended August 21, 2004]

5.22.3.4 4. All sanitary and industrial landfill facilities, including those that dispose dry waste, shall be constructed in a manner that adheres to strict environmental safeguards. [Delaware Regulations Governing Solid Waste, Sections 5.1.2 and 6.1.2, amended August 21, 2004]

5.22.3.5 No cell of a new sanitary landfill shall be located:

5.22.3.5.1 Within the 100 year flood plain.

5.22.3.5.2 b. Within an area that may cause or contribute to the degradation of any state or federal wetland (unless the owner can demonstrate to the Department that there is no impact to any regulated wetlands on site or any impact will be mitigated).

5.22.3.5.3 C. within 200 feet of the facility property boundary unless approved by the Department.

5.22.3.5.4 Within one mile of any state or federal wildlife refuge, wildlife area, or park, unless specifically exempted from this requirement by the Department.

5.22.3.5.5 Within 10,000 feet of any airport runway currently used by turbojet aircraft or 5,000 feet of any airport runway currently used by piston-type aircraft, unless a waiver is granted by the Federal Aviation Administration.

- 5.22.3.5.6 So as to be in conflict with any locally adopted land use plan or zoning requirement.
 - 5.22.3.5.7 Within the wellhead protection area of a public water supply well or well field or a formally designated aquifer resource protection area.
 - 5.22.3.5.8 Within 200 feet of a fault that has had displacement during Holocene time (unless it can be demonstrated that a lesser setback distance would prevent damage to the structural integrity of the landfill unit and be protective of human health and the environment.)
 - 5.22.3.5.9 Within a seismic impact zone (unless it can be demonstrated that all containment structures, including liners, leachate collection systems and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site).
 - 5.22.3.5.10 In areas where valuable aquifers would be threatened by contaminant releases (unless viable alternatives have been dismissed and stringent design measures have been incorporated to minimize the possibility and magnitude of releases). [Delaware Regulations Governing Solid Waste, Sections 5.1.2 and 6.1.2, amended August 21, 2004; 7 *Del. C.* Ch 60, Subch. VI]
- 5.22.3.6 No new industrial landfill, including those that dispose dry waste, shall be located in an area such that solid waste would at any time be deposited:
- 5.22.3.6.1 Within the 100 year flood plain.
 - 5.22.3.6.2 In an area that may cause or contribute to the degradation of any state or federal wetland (unless the owner can demonstrate to the Department that there is no impact to regulated wetlands on site or any impact will be mitigated).
 - 5.22.3.6.3 Within one mile of any state or federal wildlife refuge, wildlife area, or park, unless specifically exempted from this requirement by the DNREC.
 - 5.22.3.6.4 So as to be in conflict with any locally adopted land use plan or zoning requirement.
 - 5.22.3.6.5 f. Within the wellhead protection area of a public water supply well or well field. [State of Delaware Regulations Governing Solid Waste, Sections 6.1.3, amended August 21, 2004; 7 *Del. C.* CH 60, Subch VI and Ch 66]
- 5.22.3.7 7. An impermeable liner shall be provided at all sanitary and industrial landfills to restrict the migration of leachate from the landfill and to prevent contamination of the underlying ground water. [Delaware Regulations Governing Solid Waste, Sections 5.3.1 and 6.3.1, amended August 21, 2004]
- 5.22.3.8 All sanitary and industrial landfills, including those that dispose dry waste, shall be designed and constructed to include a leachate collection system, a leachate treatment and disposal system, and a leachate monitoring system. [Delaware Regulations Governing Solid Waste, Sections 5.4.1 and 6.4.1, amended August 21, 2004]

- 5.22.3.9 Resource recovery facilities shall be located only in areas where the potential for degradation of the quality of air, land, and water is minimal. [Regulations Governing Solid Waste, Section 9.2.1, amended August 21, 2004]
- 5.22.3.10 No new resource recovery facility shall be located in an area such that solid waste would at any time be handled:
- 5.22.3.10.1 Within the 100 year flood plain;
 - 5.22.3.10.2 Within any state or federal wetland;
 - 5.22.3.10.3 Within 1,000 feet of any state or federal wildlife refuge, wildlife area, or park; or
 - 5.22.3.10.4 So as to be in conflict with any locally adopted land use plan or zoning requirement. [Delaware Regulations Governing Solid Waste, Sections 9.2.2, amended August 21, 2004]
- 5.22.3.11 In addition, any facility that processes municipal solid waste shall not be located within 10,000 feet of any airport currently used by turbojet aircraft or 5,000 feet of any airport runway currently used by piston-type aircraft, unless a waiver is granted by the Federal Aviation Administration. [Delaware Regulations Governing Solid Waste, Sections 9.2.2, amended August 21, 2004]
- 5.22.3.12 Transfer stations shall be located only in areas where the potential for degradation of the quality of air, land, and water is minimal. [Delaware Regulations Governing Solid Waste, Sections 10.2.1, amended August 21, 2004]
- 5.22.3.13 Transfer stations shall be located adjacent to access roads capable of withstanding anticipated load limits. [Delaware Regulations Governing Solid Waste, Sections 10.2.2, amended August 21, 2004]
- 5.22.3.14 No new transfer station shall be located in an area such that solid waste would at any time be handled:
- 5.22.3.14.1 Within the 100 year flood plain;
 - 5.22.3.14.2 Within any state or federal wetland; or
 - 5.22.3.14.3 So as to be in conflict with any locally adopted land use plan or zoning requirement. [Delaware Regulations Governing Solid Waste, Sections 10.2.3, amended August 21, 2004]
- 5.22.3.15 All transfer stations shall be designed and constructed to include a leachate collection and disposal system that will prevent leachate (including wastewater generated during normal operation such as washout and cleaning of equipment, trucks, and floors) from contaminating the soil, surface water, or groundwater. [Delaware Regulations Governing Solid Waste, Sections 10.4.1, amended August 21, 2004]

5.22.4 HAZARDOUS WASTE MANAGEMENT

- 5.22.4.1 Due to ever-increasing quantities of hazardous wastes and the risks posed by such risks to the environment and public health and safety, the best available

technology to manage and dispose of hazardous wastes should be utilized to alleviate the associated adverse health, environmental and aesthetic impacts. [7 *Del. C. § 6301*]

- 5.22.4.2 “Hazardous Wastes” means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed, [7 *Del. C. §6302(7)*]
- 5.22.4.3 “Disposal” means the discharge, deposit, injection, dumping, spilling, leaking or placing of any hazardous waste into or on any land, water or into the air so that such hazardous waste or any constituent thereof may enter the environment to be emitted into the air, or discharged into any water including groundwaters, or any other management of hazardous waste in which the handler voluntarily relinquishes control of the waste in a manner inconsistent with the requirements of this chapter and the regulations promulgated thereunder. [7 *Del. C. §6302(4)*]
- 5.22.4.4 No person shall generate, store, transport, treat or dispose of hazardous wastes in this State without reporting such activity to the DNREC. [7 *Del. C. §6304(a)(b)*; Delaware Regulations Governing the Location of Hazardous Waste Storage, Treatment, and Disposal Facilities, revised October 22, 1996]
- 5.22.4.5 Land emplacement units, defined as any facility involving the placement of hazardous waste into or onto the land and which is designed and operated to contain waste in a manner that prevents the migration of pollutants from the site such as landfills; land farms/land treatment; land burial following solidification or encapsulation; above ground perpetual storage; waste piles; surface impoundments; and on-ground, in-ground, and underground tanks shall be prohibited in the following:
 - 5.22.4.5.1 The 100-year flood hazard area;
 - 5.22.4.5.2 Wetlands;
 - 5.22.4.5.3 Freshwater wetlands;
 - 5.22.4.5.4 Carbonate bedrock areas;
 - 5.22.4.5.5 Carbonate bedrock drainage areas;
 - 5.22.4.5.6 Public water supply watersheds upstream from the points of withdrawal;
 - 5.22.4.5.7 Subcropping aquifer and aquifer recharge areas.
 - 5.22.4.5.8 Significant environmental lands;
 - 5.22.4.5.9 Areas where the transmissivity of the unconfined aquifer is greater than 10,000 ft²/day;
 - 5.22.4.5.10 Areas where groundwater under natural conditions could come into contact with the waste;
 - 5.22.4.5.11 Wellhead protection areas; and

- 5.22.4.5.12 Areas within 500 feet of a fault that has experienced movement within the last 35,000 years (capable fault). [Delaware Regulations Governing the Location of Hazardous Waste Storage, Treatment, and Disposal Facilities, Sections 1 and 3.1, revised October 22, 1996]
- 5.22.4.6 Non-land emplacement storage, treatment, and disposal units shall be prohibited in the following:
 - 5.22.4.6.1 The 100-year flood hazard area;
 - 5.22.4.6.2 Wetlands;
 - 5.22.4.6.3 Freshwater wetlands;
 - 5.22.4.6.4 Carbonate bedrock areas;
 - 5.22.4.6.5 Carbonate bedrock drainage areas;
 - 5.22.4.6.6 Public water supply watersheds upstream from reservoirs;
 - 5.22.4.6.7 Significant environmental lands;
 - 5.22.4.6.8 Areas within 500 feet of a fault that has experienced movement within the last 35,000 years (capable fault); and
 - 5.22.4.6.9 Wellhead protection areas. [Delaware Regulations Governing the Location of Hazardous Waste Storage, Treatment, and Disposal Facilities, Section 4.1.1, revised October 22, 1996]
- 5.22.4.7 The following units shall be exempt from the Regulations Governing the Location of Hazardous Waste Storage, Treatment, and Disposal Facilities:
 - 5.22.4.7.1 On-site reclamation units where the principle activity at the facility is not the management of wastes.
 - 5.22.4.7.2 Industrial boilers and furnaces that burn hazardous waste fuels for energy recovery.
 - 5.22.4.7.3 Units that have permits by rule and/or approval from the Department to operate under an emergency administrative order. [Delaware Regulations Governing the Location of Hazardous Waste Storage, Treatment, and Disposal Facilities, Section 6.1, revised October 22, 1996]

5.22.5 CLEANUP OF HAZARDOUS SUBSTANCES

- 5.22.5.1 Prompt containment and removal of hazardous substances which have been stored or disposed of at facilities in a manner that threatens public health or the environment, is required to eliminate or minimize the risk to public health or welfare or the environment 7 *Del. C.* §9102(a)]
- 5.22.5.2 The cleanup of facilities should be conducted with the costs thereof recovered from the private parties that do not exercise their responsibility to clean up the facilities for which they are responsible [7 *Del. C.* §9102(b)]
- 5.22.5.3 Opportunities and incentives should be provided to encourage the remedy of contaminated facilities to yield economic revitalization and redevelopment within the state. [7 *Del. C.* §9102(c)]

- 5.22.5.4 The following persons, with few exceptions, are liable for the cost of remediation of a facility and site from which there is or has been a release or imminent threat of release:
- 5.22.5.4.1 Any person who has owned or operated the facility at any time;
 - 5.22.5.4.2 Any person who owned or possessed a hazardous substance and who by contract, agreement or otherwise arranged for disposal or treatment of a hazardous substance at the facility;
 - 5.22.5.4.3 Any person who arranged with a transporter for transport, disposal or treatment of a hazardous substance to the facility;
 - 5.22.5.4.4 Any person who generated, disposed of or treated a hazardous substance at the facility;
 - 5.22.5.4.5 Any person who accepted any hazardous substance for transport to the facility, when the facility was selected by the transporter; and
 - 5.22.5.4.6 Any person who is responsible in any other manner for a release or imminent threat of release. [7 *Del. C.* §9105]
- 5.22.5.5 Hazardous substance means:
- 5.22.5.5.1 Any solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical or chemical characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating irreversible illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed;
 - 5.22.5.5.2 Any hazardous substance as defined in CERCLA; or
 - 5.22.5.5.3 Any substance determined by the Secretary through regulation to present a risk to public health or welfare or the environment if released into the environment. [7 *Del. C.* §9103(1)]
- 5.22.5.6 Where a release or imminent threat of release of hazardous substances requires a response action, potentially responsible parties that have been as noticed by the Department, shall conduct such response action as expeditiously as possible. Any approval by the Department of a response action shall occur through settlement agreement deemed appropriate by the Department with most actions requiring Departmental oversight. Similarly, actions conducted as part of the Voluntary Cleanup Program shall also be carried out in a manner approved by DNREC. [Delaware Regulations Governing Hazardous Substance Cleanup, Sections 6.3, 8.2, 13.1, 13.3, amended February, 2002]

5.22.6 UNDERGROUND STORAGE TANKS

- 5.22.6.1 The installation, operation, retrofitting and abandonment of underground storage tanks shall be strictly controlled and monitored to prevent leaks, and/or, detect them at the earliest possible stage minimize further degradation of groundwater.” [Delaware Regulations Governing Underground Storage Tank Systems, Part A Section 1.1.2, revised January 11, 2008]
- 5.22.6.2 An “Underground Storage Tank” is defined as a containment vessel, including underground pipes connected thereto, which is used to contain an accumulation of regulated substances, and the volume of which, including the volume of the underground pipes connected thereto, is 10 per centum or more beneath the surface of the ground. Such terms does not include any:
- 5.22.6.2.1 Septic tank.
 - 5.22.6.2.2 Certain pipeline facilities (including gathering lines);
 - 5.22.6.2.3 Surface impoundment, pit, pound, lagoon.
 - 5.22.6.2.4 Storm water wastewater collection system.
 - 5.22.6.2.5 Flow-through process tank.
 - 5.22.6.2.6 Liquid trap or associated gathering lines directly related to oil or gas production or gathering operations.
 - 5.22.6.2.7 Storage tank situated in an underground area (such as basement, cellar, mineworking drift, shaft or tunnel) if the storage tank is situated upon or above the surface of the floor.[Delaware Regulations Governing Underground Storage Tank Systems, Part A, Sect. 2, revised January 11, 2008; 7 *Del. C.* §7402(20)]
- 5.22.6.3 “Regulated Substance” means
- 5.22.6.3.1 One percent (1%) or more by volume of a hazardous substance as defined in Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 (42 USC Section 9601(14)) and any amendments thereto; but not including any substance regulated as a hazardous waste under RCRA Subtitle C.
 - 5.22.6.3.2 One tenth percent (0.1%) or more by volume of a carcinogen (EPA);
 - 5.22.6.3.3 Petroleum, including crude oil or any fraction thereof, including without limitation petroleum and substances containing petroleum comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading, and finishing, such as motor oils and fuels, residual fuel oils, lubricants, petroleum solvents, used oils and biodiesels,
 - 5.22.6.3.4 Alternative fuels including but not limited to ethanol and methanol in concentrations up to one hundred percent (100%), and
 - 5.22.6.3.5 Any mixture of the foregoing 5.22.6.3.1 – 5.22.6.3.4. [Delaware Regulations Governing Underground Storage Tank Systems, Part A, Section 2, revised January 11, 2008]

- 5.22.6.4 With the exception of when a release is suspected from previously removed or closed in place UST systems, the following underground storage tank systems shall be exempted from the requirements of the Regulations Governing Underground Storage Tank Systems:
- 5.22.6.4.1 Agricultural/Farm and residential UST systems of 1,100 gallons or less used for storing motor fuels for non commercial purposes.
 - 5.22.6.4.2 UST systems containing heating oil of 1,100 gallons or less used for consumptive purposes on the premises where stored.
 - 5.22.6.4.3 Any UST system holding hazardous wastes listed or identified under Subtitle C of the Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances;
 - 5.22.6.4.4 Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act,
 - 5.22.6.4.5 Equipment and machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks,
 - 5.22.6.4.6 Any UST system whose capacity is 110 gallons or less; and
 - 5.22.6.4.7 Any emergency spill or overflow containment UST system that is expeditiously emptied after use.
 - 5.22.6.4.8 However, reports for these systems must still be submitted for test failures, release investigations, remedial actions and site closures. [Delaware Regulations Governing Underground Storage Tank Systems, Part A, Section 1.2, revised January 11, 2008]
- 5.22.6.5 No person may install an Underground Storage Tank system containing radioactive material that is part of an emergency generator system at nuclear power generation facilities, airport hydrant fuel systems, or systems with field constructed tanks for the purpose of storing regulated substances unless the UST system:
- 5.22.6.5.1 Will prevent releases due to corrosion or structural failure for the operational life of the UST system;
 - 5.22.6.5.2 Is cathodically protected against corrosion, constructed of non-corrodible material, steel clad with a non-corrodible material, or designed in a manner to prevent the release or threatened release of any stored substance; and
 - 5.22.6.5.3 Is constructed or lined with material that is compatible with the stored substance [Delaware Regulations Governing Underground Storage Tank Systems, Part A, Section 1.3, revised January 11, 2008]
- 5.22.6.6 Any person that owns or operates an underground storage tank system must register each underground storage tank system with the Department of Natural Resources and Environmental Control. [Delaware Regulations Governing Underground Storage Tank Systems, Part A, Section 4.1.1, revised January 11, 2008]

- 5.22.6.7 Prior to the installation of any underground storage tank system a site survey must be initiated by the facility owner and operator. The pre-installation site survey must be conducted to determine the locations of nearby buildings, underground utilities and sewer lines. Private/public drinking water wells, rivers, streams, lakes, canals, and other environmentally sensitive locations shall be recorded and incorporated into the design of the underground storage tank system facility. [Delaware Regulations Governing Underground Storage Tank Systems, Part B, Section 1.2.1 and 1.2.2, revised January 11, 2008]
- 5.22.6.8 Owners and operators of UST systems shall provide a method, or combination of methods of release detection that:
- 5.22.6.8.1 Can detect a release from any portion of the tank and the connected underground piping that routinely contain regulated substance;
 - 5.22.6.8.2 Is installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications, including routine maintenance and service checks for operability or running condition; and
 - 5.22.6.8.3 Meets the performance standards for release detection in this section, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer.
 - 5.22.6.8.4 The method shall be capable of detecting the leak rate or quantity specified for precision tank testing, automatic tank gauging, line leak detectors, and line tightness testing methods specified in this section with a probability of detection of at least 0.95 and a probability of false alarm no greater than 0.05. [Delaware Regulations Governing Underground Storage Tank Systems, Part B Section 1.9, Part C Section 1.9 and Part D Section 1.9 revised January 11, 2008]
- 5.22.6.9 Not later than December 22, 1998, no person must use or operate an UST system without complying with one of the following:
- 5.22.6.9.1 UST system design requirements;
 - 5.22.6.9.2 UST system internal lining requirements and/or UST system cathodic protection requirements; or
 - 5.22.6.9.3 The permanent removal or closure in place requirements including applicable hydrogeologic investigation and remedial action requirements. [Delaware Regulations Governing Underground Storage Tank Systems, Part B, Section 2.34.2, revised January 11, 2008]
- 5.22.6.10 The Department reserves the right to require secondary containment or equivalent protection for underground storage tank system installations where aquifers underlying the UST facility are determined to need such protection, or where groundwater below the UST facility is within a well head protection area, or where groundwater is susceptible to contamination in order to protect the safety, health, welfare and/or environment of the State. [Delaware Regulations Governing Underground Storage Tank Systems, Part B, Section 1.4.1, revised January 11, 2008]

- 5.22.6.11 Owners and Operators shall ensure that all UST Systems storing heating oil (>1,100 gallons), regulated substances, hazardous substances, shall be designed, constructed, installed and operated in accordance with manufacturer's specifications, and accepted engineering practices and procedures; and in a manner which will prevent releases of regulated Substances to the ground waters, surface waters or soils of the State due to corrosion, structural failure, spills and overfills for the operational life of the underground storage tank system.[Delaware Regulations Governing Underground Storage Tank Systems, Part B, Section 1.1, Part C, Section 1.1 and Part D, section 1. 1 revised January 11, 2008]
- 5.22.6.12 Owners and Operators of UST Systems shall demonstrate financial responsibility for taking corrective action and for compensating third parties for Bodily Injury and Property Damage caused by Accidental Releases from the operation of UST Systems. [Delaware Regulations Governing Underground Storage Tank Systems, Part F, Section 1.3.1, revised January 11,2008]
- 5.22.6.13 "Hazardous Substances UST System" means an underground storage tank system that contains a hazardous substance defined in Section 101(14) of the CERCLA (but not including any substance regulated as a hazardous waste under RCRA Subtitle C) or any mixture of such substances and petroleum, and which is not a petroleum UST system. [Delaware Regulations Governing Underground Storage Tank Systems, Part A, Section 2 – Definitions, revised January 11, 2008]

5.23 DEVELOPMENT

5.23.1 ADVISORY POLICIES

5.23.1.1 Relating to Community Patterns:

- 5.23.1.1.1 New community development actions should discourage "sprawl".
- 5.23.1.1.2 New community development generally should occur within or near existing population concentrations where utility networks and community facilities and services are already in place or can economically be expanded.
- 5.23.1.1.3 Established urban centers, small and large, should be revitalized and recognized for the values of their in place structures, facilities and institutions.

5.23.1.2 Relating to Commercial Land:

- 5.23.1.2.1 Commercial strip development that impedes traffic flow throughout the highway network, reduces the operating capacity of roadways, and decentralizes commercial activity should be significantly curtailed.
- 5.23.1.2.2 Major commercial development should be encouraged in existing central business districts.
- 5.23.1.2.3 Highway oriented uses should be clustered and not strung out along major highways.

5.23.1.3 Relating to Industry and Industrial Land Use:

- 5.23.1.3.1 Use of existing unused industrial sites and buildings should be encouraged wherever they can be adapted to today's industrial needs.
- 5.23.1.3.2 Delaware should encourage the introduction of new industries that optimize the State's resources and the special skills and needs of Delaware residents.
- 5.23.1.3.3 Delaware should encourage development of industrial areas that are located so that services can be provided economically, mass transportation can serve the needs of the workers, and the industries will draw on and support existing rail lines, ports, and air terminals.
- 5.23.1.3.4 Delaware should assume regulatory control over any future sites or rights-of-way for marine terminals, bulk transfer facilities, or utilities including pipelines.
- 5.23.1.3.5 Delaware and its local governments should establish standards and criteria for industrial location including optimum size, utility availability, accessibility, and the overall impact on local communities, such standards to be met prior to rezoning for industry. The State shall not promote a site for industrial purposes when utilization for that purpose is contrary to the land use plan in the area.

5.23.1.4 Relating to Institutional Land Use:

- 5.23.1.4.1 Public and tax exempt private institutions, services, and facilities should be located to serve urban concentration and should comply with land use, drainage, and other regulatory plans.

5.24 POLLUTION PREVENTION

5.24.1 GENERAL

- 5.24.1.1 Whenever possible, the generation of waste should be reduced or eliminated as expeditiously as possible, and that waste that is generated should be recovered, reused, recycled, treated or disposed of in a manner that minimizes any present or future threats to human health or the environment. [7 *Del. C.* §7802(a)(1)]

5.24.2 ADVISORY POLICIES

- 5.24.2.1 Industries should review their proposed projects for the possible use of pollution prevention opportunities.
- 5.24.2.2 Industries are encouraged to utilize the DNREC Pollution Prevention Program's services, including non-regulatory technical assistance and information, to ensure that the potential for degradation of the quality of air, land, and water is minimal.

5.25 COASTAL MANAGEMENT COORDINATION

- 5.25.1 State agencies shall provide an opportunity for one another, federal agencies, and other interested parties to review and comment on proposed actions which may be of more than local interest. [Delaware Executive Order No. 42, August 15, 1996]
- 5.25.2 State agencies responsible for implementation of the CMP shall coordinate their CMP implementation responsibilities with each other to the extent necessary to assure well informed and reasoned program decisions. [Delaware Executive Order No. 42, August 15, 1996]
- 5.25.3 All State agencies and local units of government shall consider, prior to any CMP decisions, the national interest in:
 - 5.25.3.1 Planning for and locating facilities which are necessary to meet other than local requirements; and
 - 5.25.3.2 Coastal resource conservation and preservation. [Delaware Executive Order No. 42, August 15, 1996]